

FIG.1

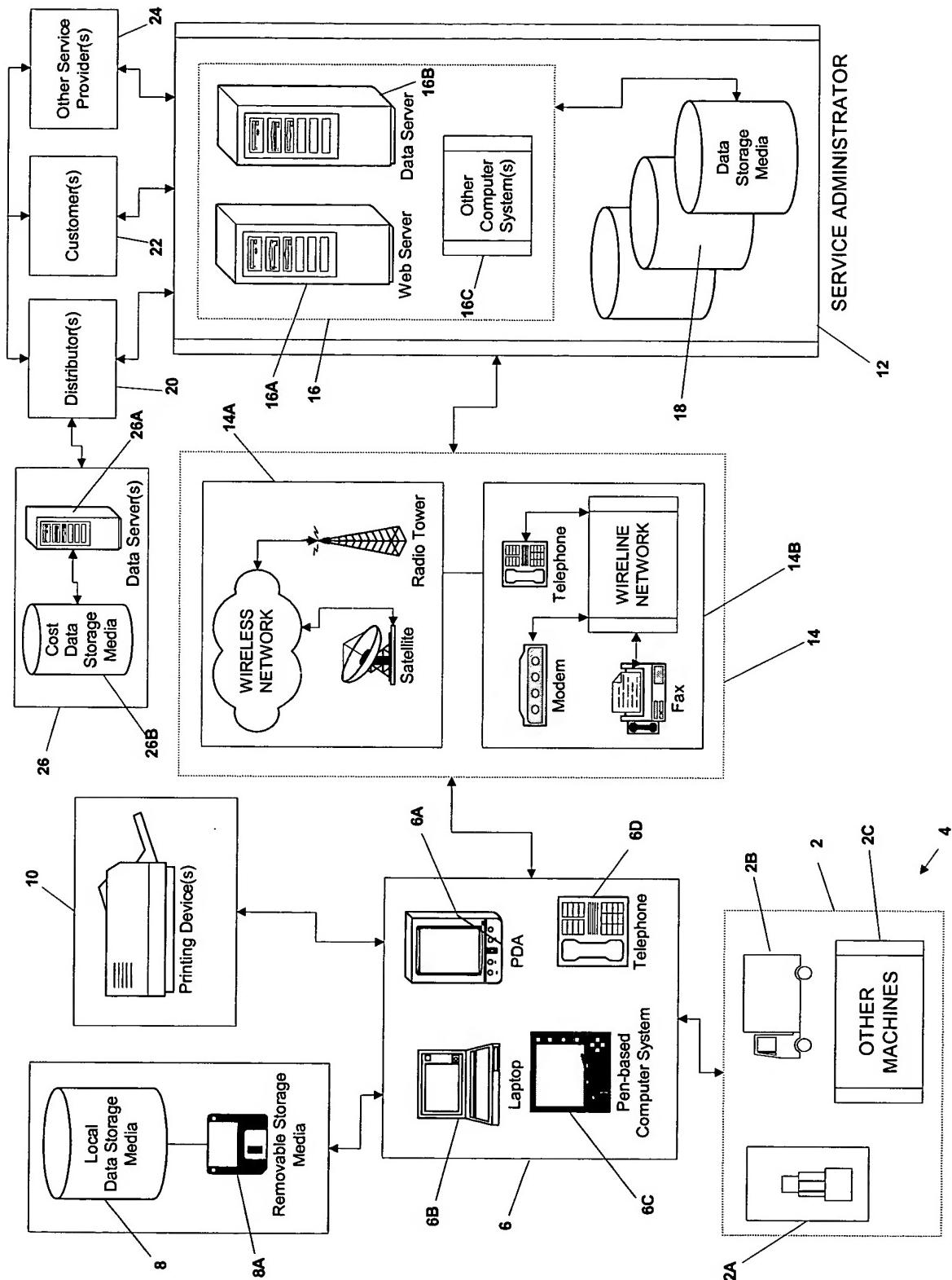


FIG.2

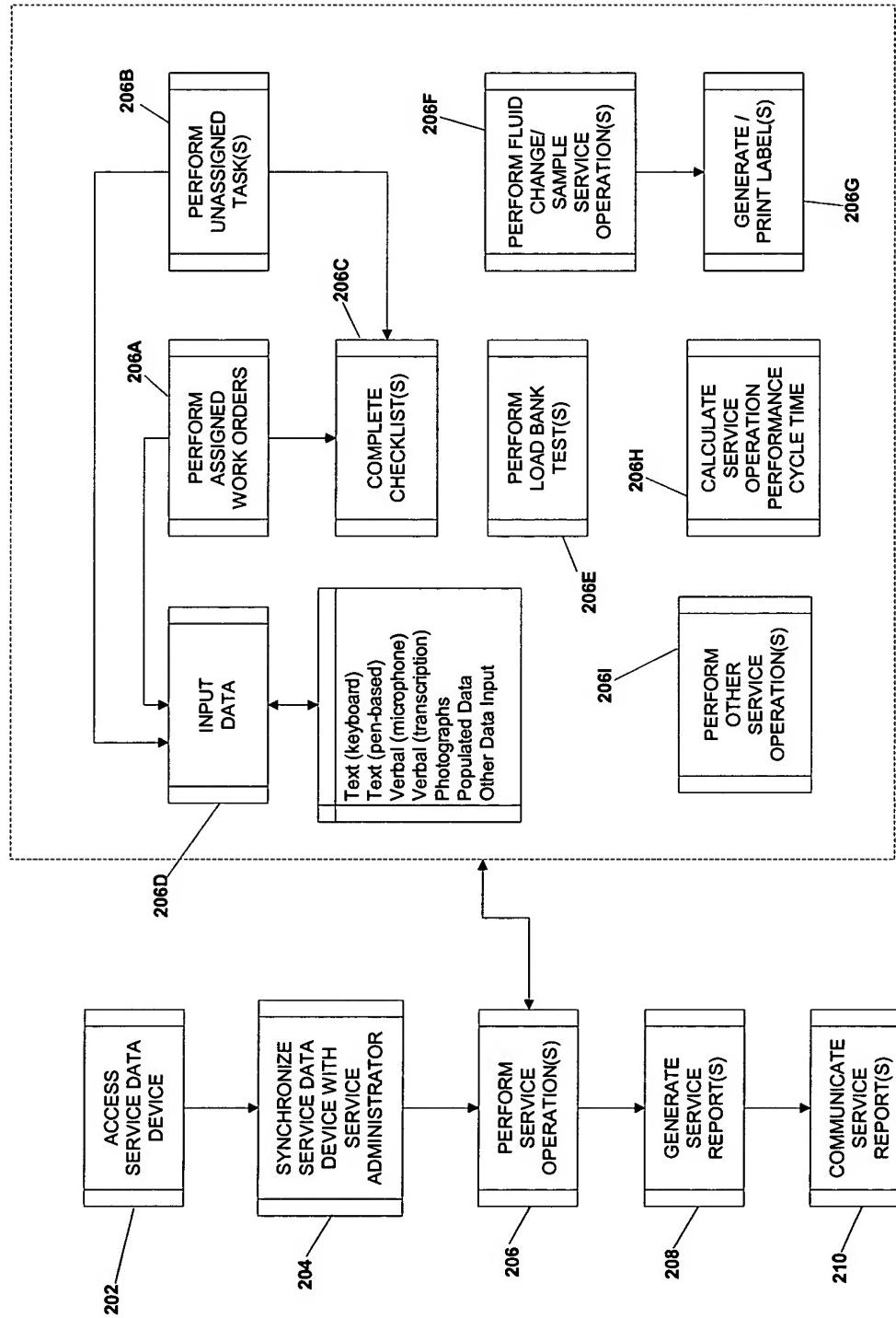


FIG. 3

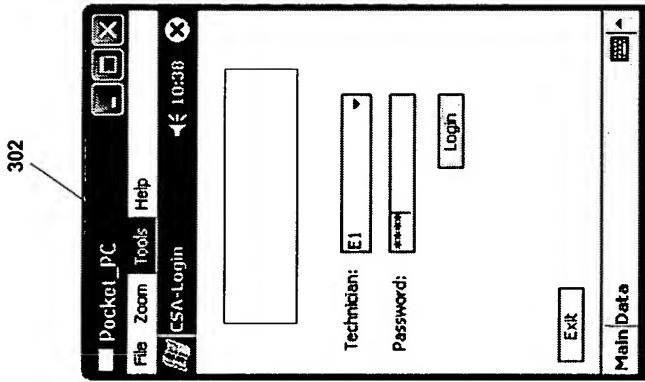
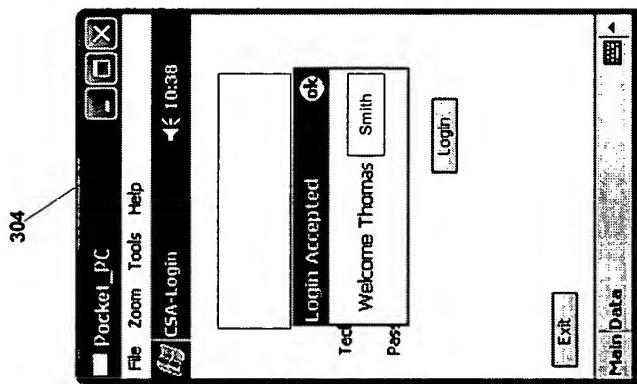
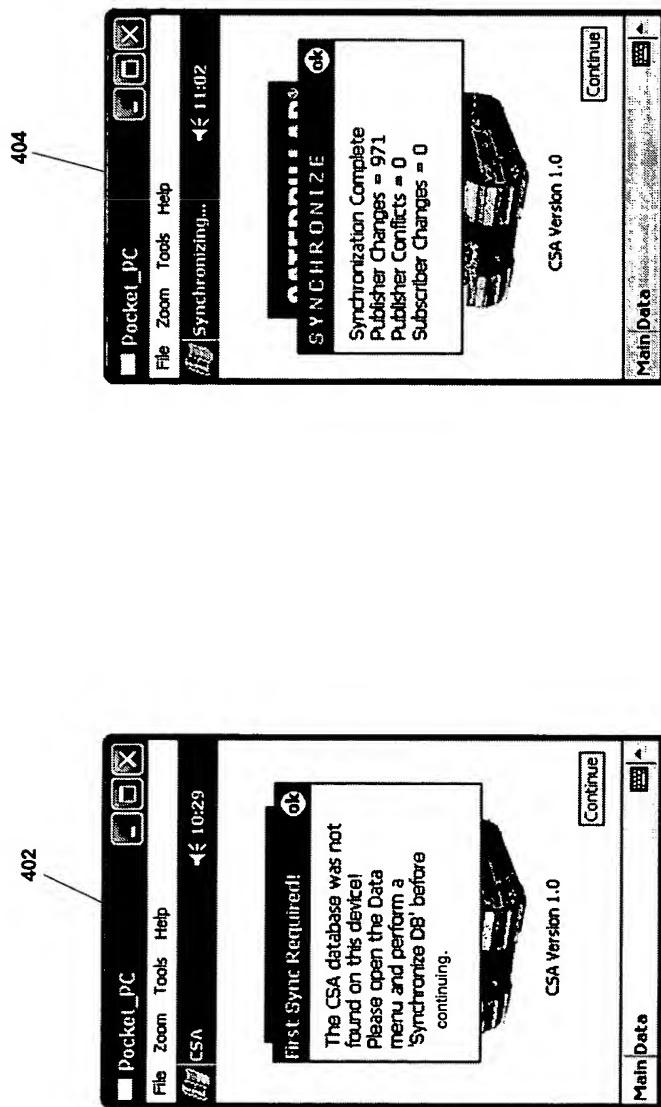


FIG. 4



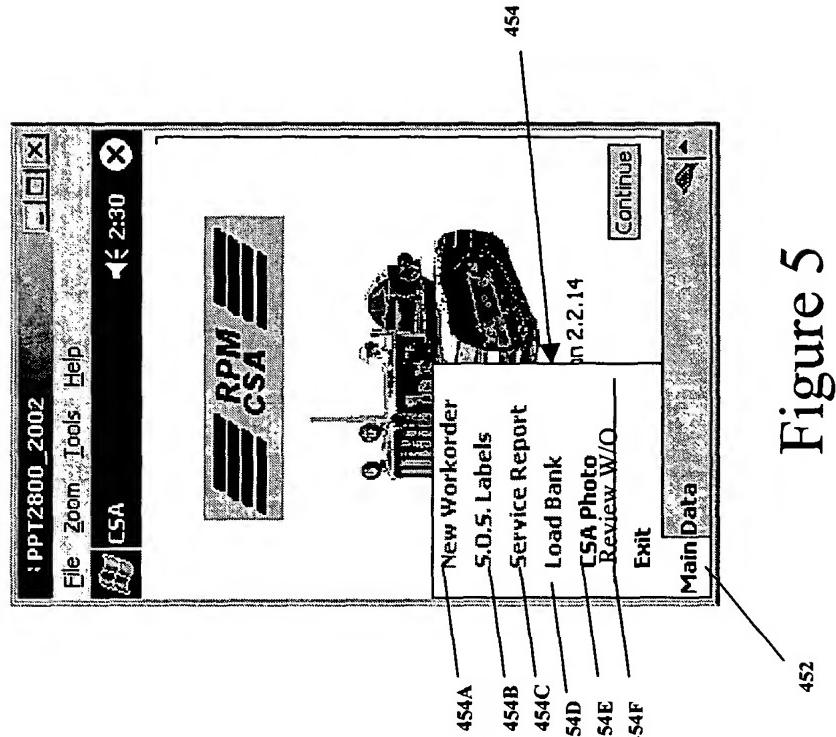


Figure 5

FIG. 6

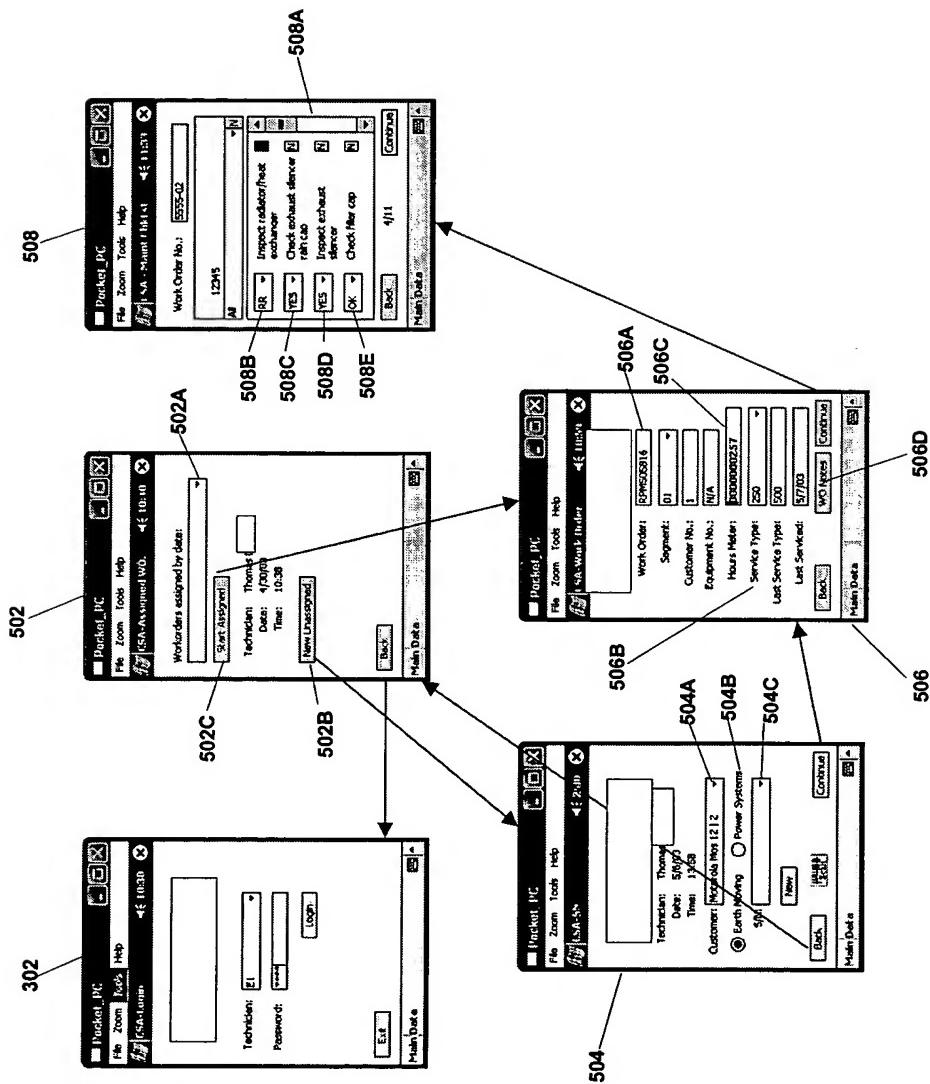


Figure 7

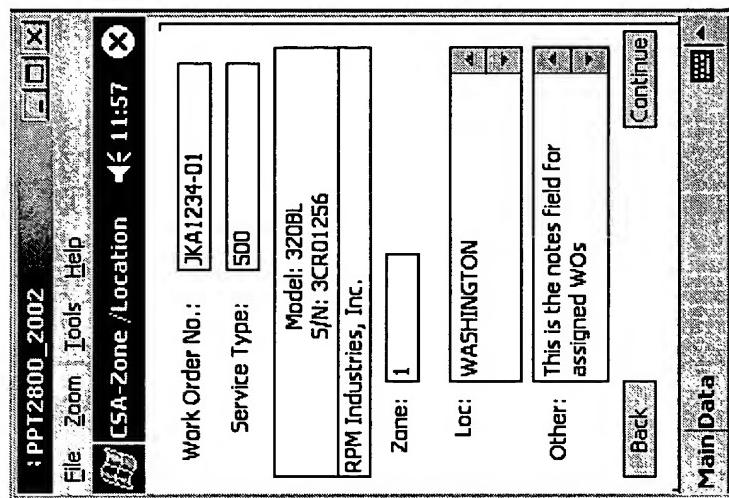


FIG. 8

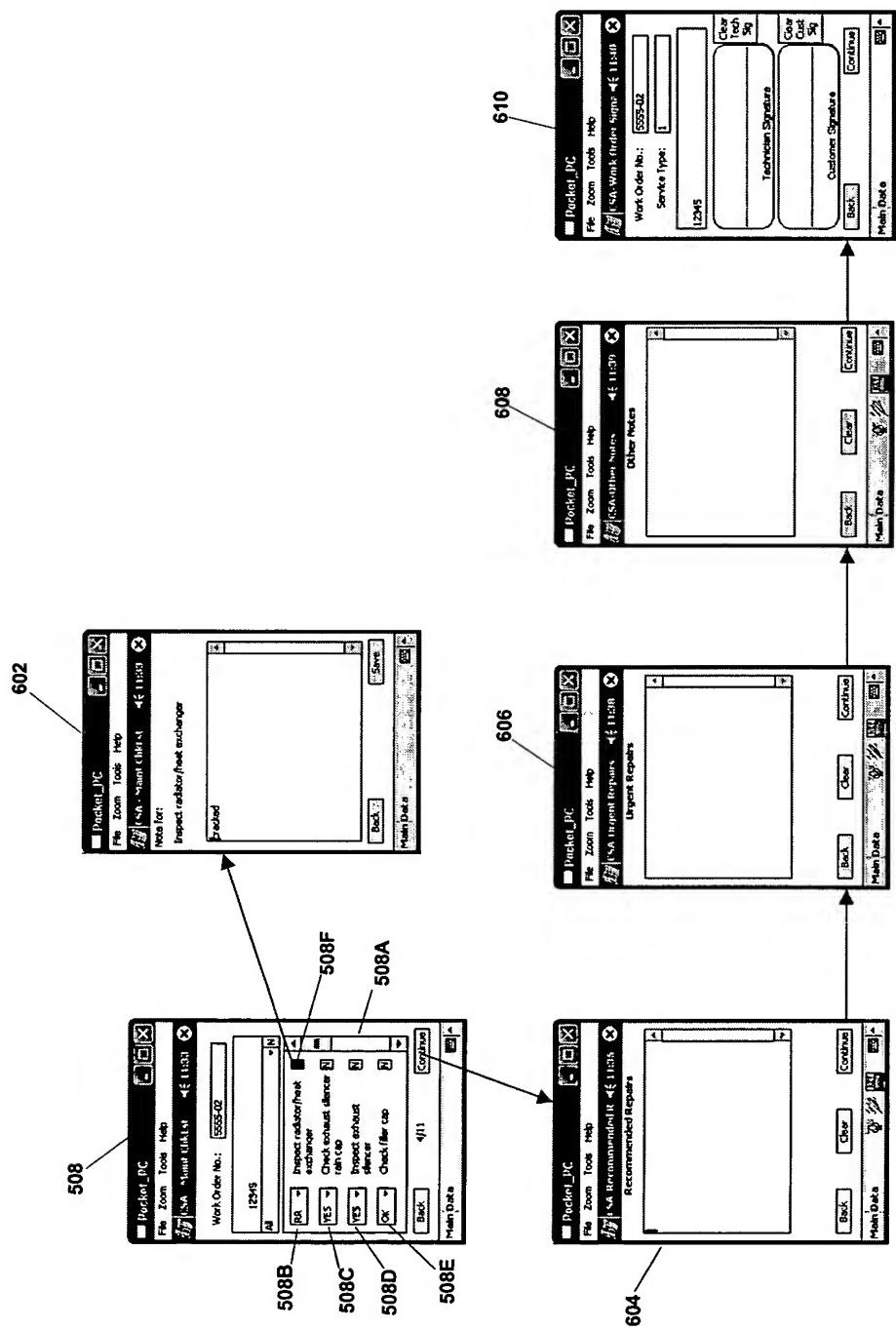


FIG. 9

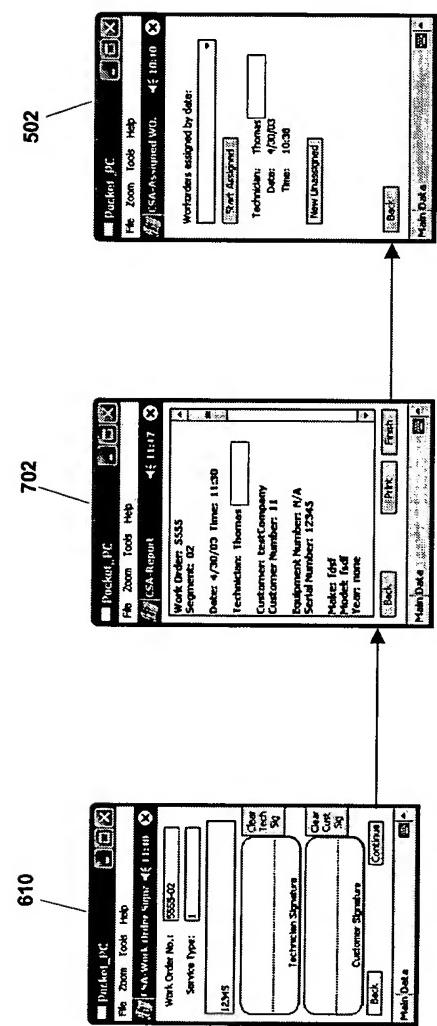


FIG. 10

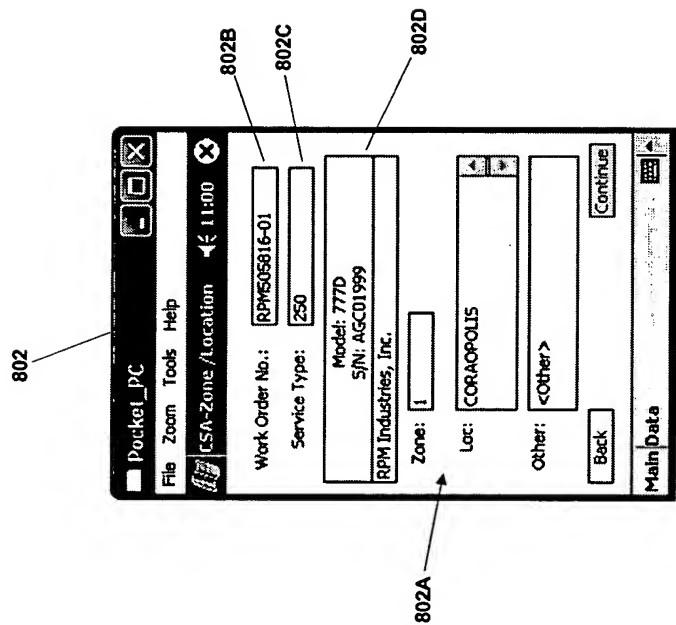
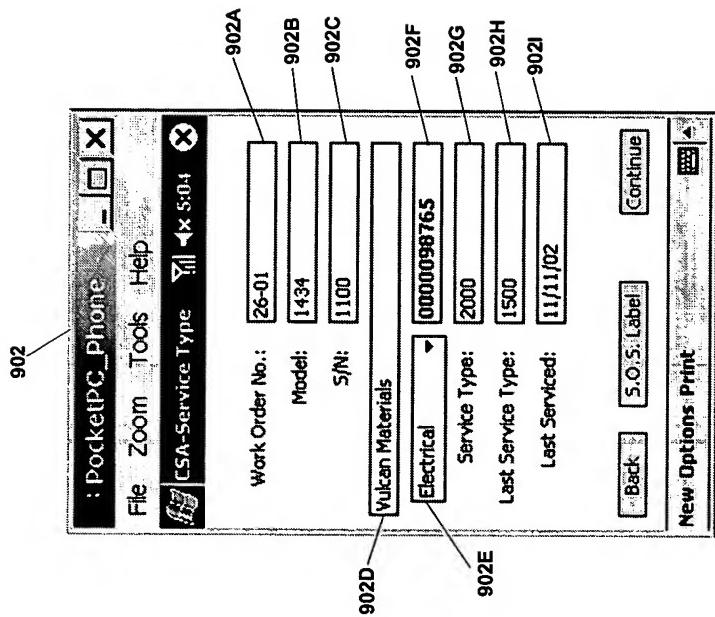


FIG.11



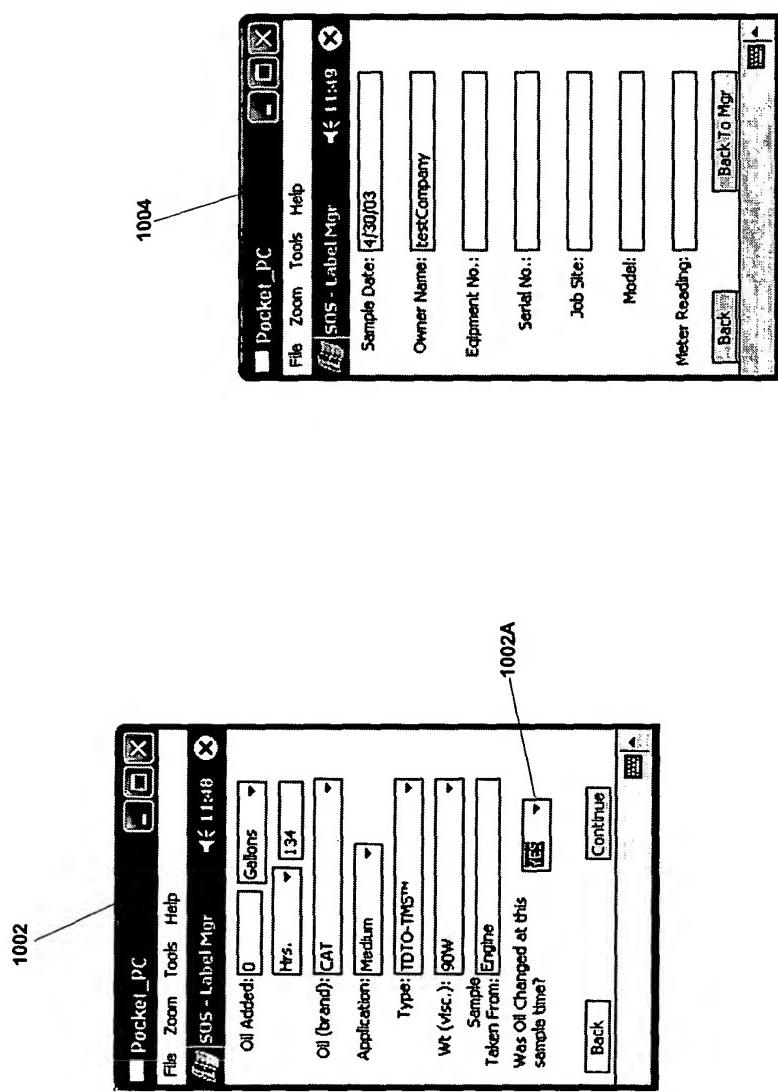


FIG. 12

Figure 13

Serial No	Compartment ID	Oil Added	Sample Date	Meter Reading	Hours On Oil	Application	Fluid ID	Viscosity ID	Oil Changed
ABCD5678	Engine	12	6/19/03 9:44 PM	250	250	Light	Engine Oil	15W40	True
ABCD5678	Transmission	0	6/19/03 9:44 PM	250	250	Medium	Transmission Oil	30	False
ABCD5678	Hydraulic	0	6/19/03 9:44 PM	250	250	Medium	Hydraulic Oil	10	False
ABCD5678	Left Rear Final	0	6/19/03 9:44 PM	250	250	Heavy	Final Drive Oil	50	False
ABCD5678	Right Rear Final	0	6/19/03 9:44 PM	250	250	Heavy	Final Drive Oil	50	False
ABCD5678	Rear Differential	0	6/19/03 9:44 PM	250	250	Heavy	Final Drive Oil	50	False
ABCD5678	Engine	12	6/26/03 7:53 AM	525	275	Light	Engine Oil	15W40	True
ABCD5678	Transmission	10	6/26/03 7:53 AM	525	525	Medium	Transmission Oil	30	True
ABCD5678	Hydraulic	0	6/26/03 7:53 AM	525	525	Medium	Hydraulic Oil	10	False
ABCD5678	Left Rear Final	0	6/26/03 7:53 AM	525	525	Heavy	Final Drive Oil	50	False
ABCD5678	Right Rear Final	0	6/26/03 7:53 AM	525	525	Heavy	Final Drive Oil	50	False
ABCD5678	Rear Differential	0	6/26/03 7:53 AM	525	525	Heavy	Final Drive Oil	50	False
ABCD5678	Engine	12	7/3/03 8:24 AM	800	275	Light	Engine Oil	15W40	True
ABCD5678	Transmission	0	7/3/03 8:24 AM	800	275	Medium	Transmission Oil	30	False
ABCD5678	Hydraulic	0	7/3/03 8:24 AM	800	800	Medium	Hydraulic Oil	10	False
ABCD5678	Left Rear Final	0	7/3/03 8:24 AM	800	800	Heavy	Final Drive Oil	50	True
ABCD5678	Right Rear Final	0	7/3/03 8:24 AM	800	800	Heavy	Final Drive Oil	50	True
ABCD5678	Rear Differential	0	7/3/03 8:24 AM	800	800	Heavy	Final Drive Oil	50	False
ABCD5678	Engine	12	7/14/03 3:14 PM	1000	200	Light	Engine Oil	15W40	True
ABCD5678	Transmission	0	7/14/03 3:14 PM	1000	475	Medium	Transmission Oil	30	False
ABCD5678	Hydraulic	0	7/14/03 3:14 PM	1000	1000	Medium	Hydraulic Oil	10	False
ABCD5678	Left Rear Final	0	7/14/03 3:14 PM	1000	200	Heavy	Final Drive Oil	50	False
ABCD5678	Right Rear Final	0	7/14/03 3:14 PM	1000	200	Heavy	Final Drive Oil	50	False
ABCD5678	Rear Differential	0	7/14/03 3:14 PM	1000	1000	Heavy	Final Drive Oil	50	True

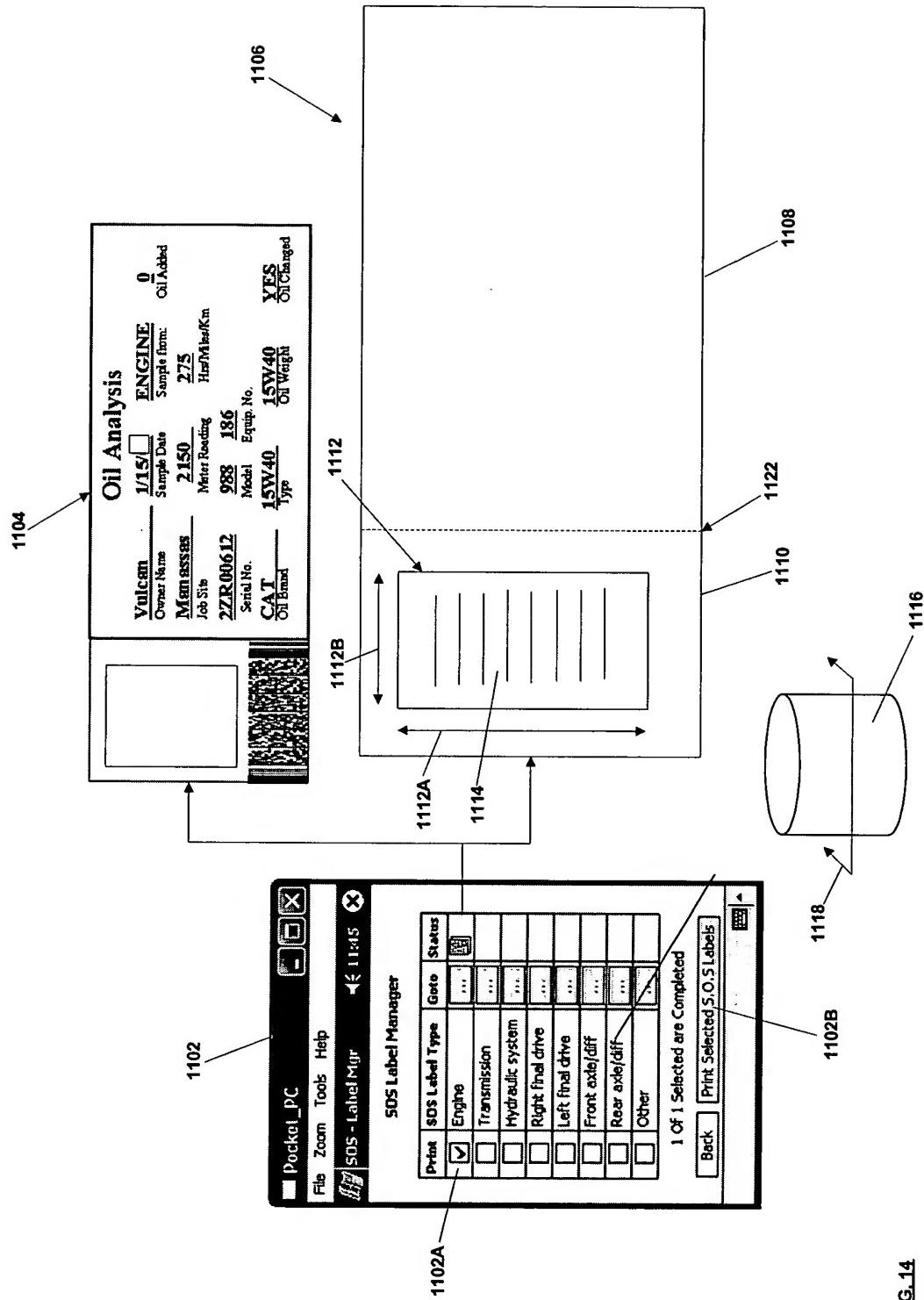
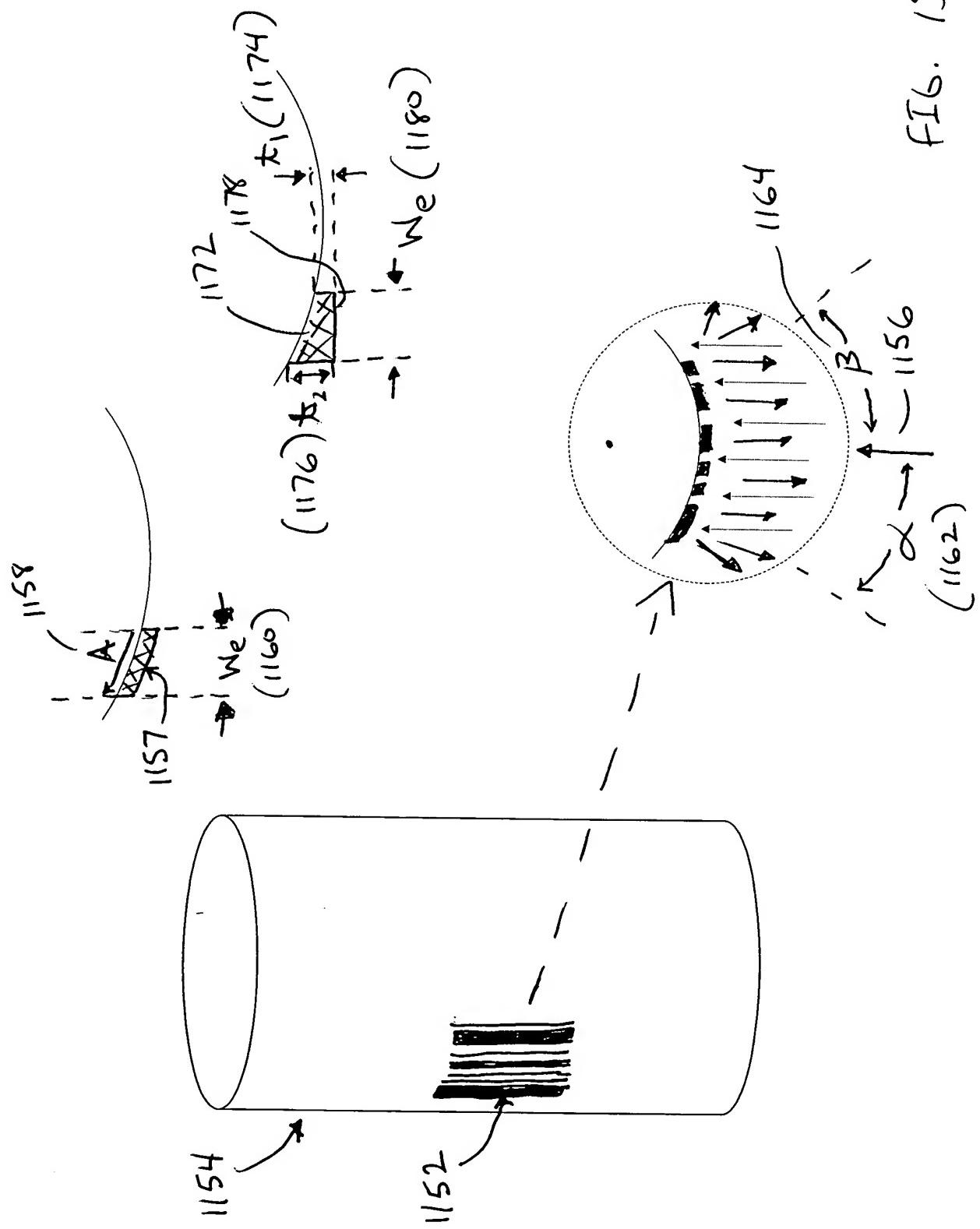


FIG.14

FIG. 15



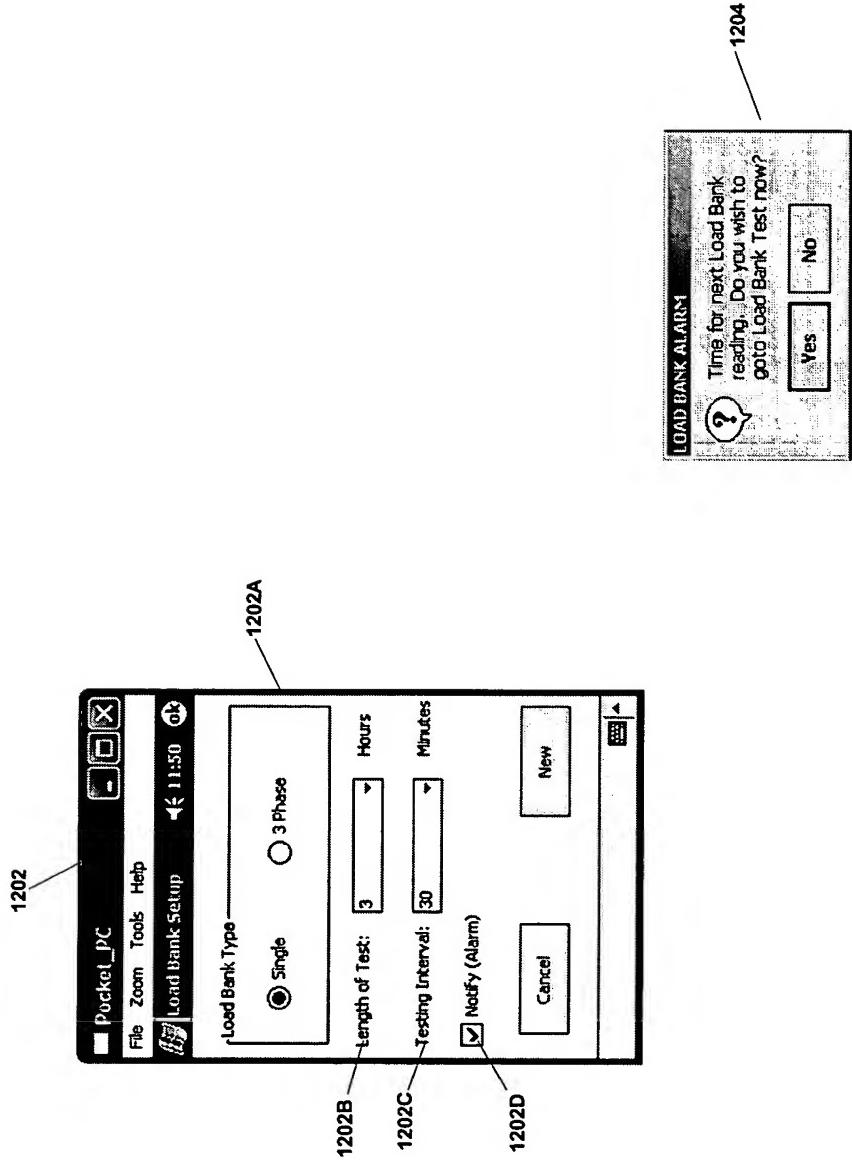


FIG. 16

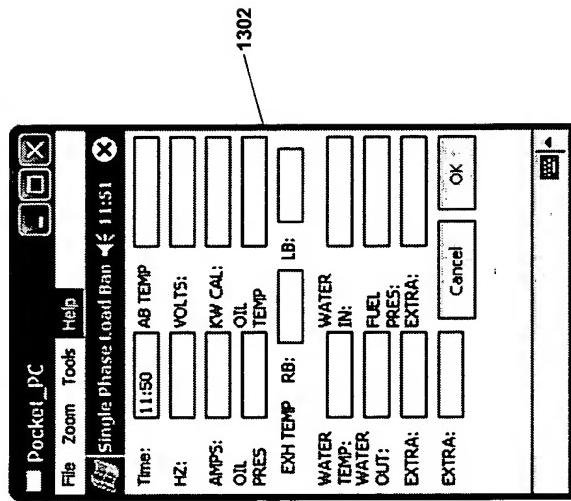


FIG. 17

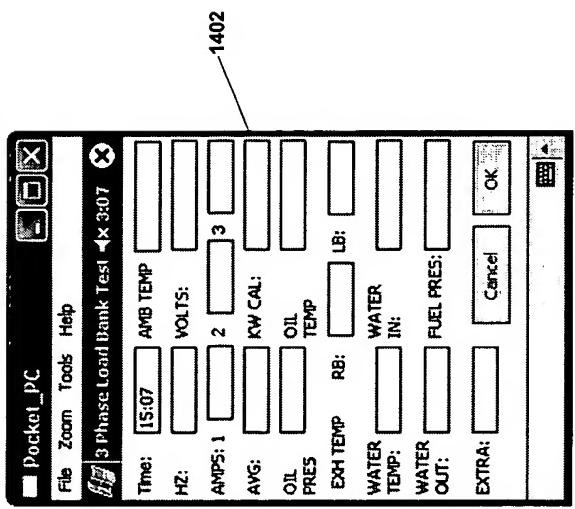


FIG. 18

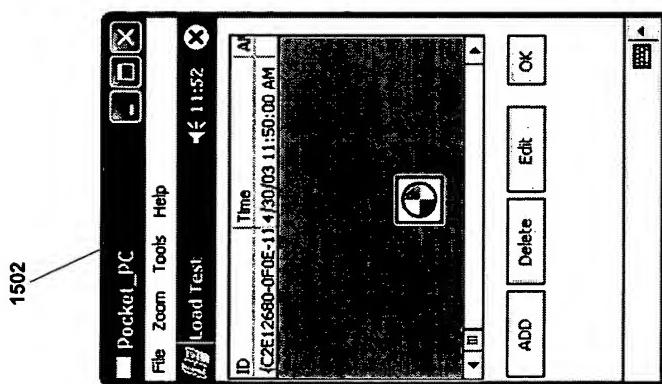
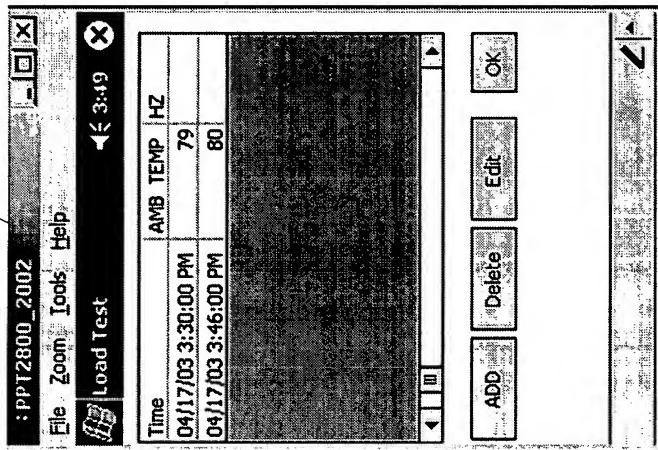


FIG.19

1602

1602A

1602B

1602C

1602D

1602E

CSA Service Report	
Dealer Code:	14
Date:	5/7/03
Work Order:	M2242
Segment:	01
Customer Name:	RPM Industries, Inc.
Model/SN:	Dump [133455]
Equipment Location:	Stone Mountain
Co Equip #:	2
AC SN:	[REDACTED]
Employee ID:	1
Hrs:	1502
Miles:	[REDACTED]
Instructions:	[REDACTED]
<input type="button" value="Cancel"/> <input type="button" value="Continue"/>	

FIG. 20

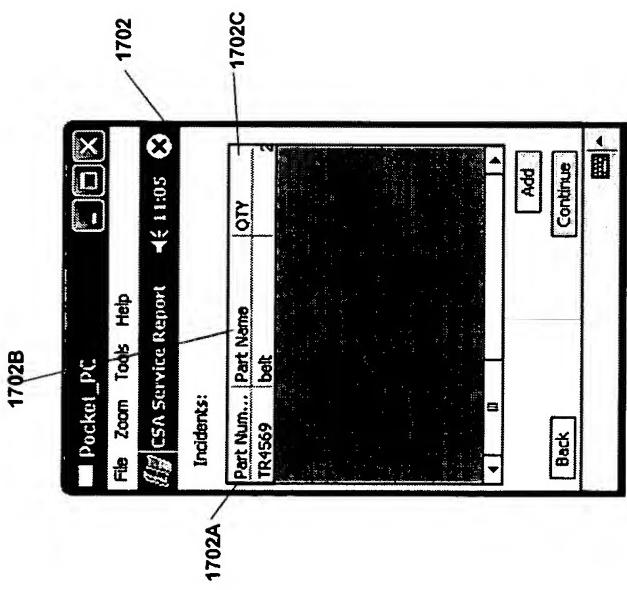


FIG. 21

1802

File Zoom Tools Help

CSA Service Report 11:05

Part Number Responsible: TR4569

Part Name: belt QTY: 2

Desc. code: G-General Repair

Group Number Containing Part:

Group Name: Did this incident make the product inoperable?

Optional Comments: Add

Back Continue

1802A
1802B
1802C
1802D

This figure is a screenshot of a mobile application titled "Pocket_Pc". The main title bar says "Pocket_Pc". Below it is a toolbar with icons for File, Zoom, Tools, and Help. The main content area is titled "CSA Service Report" and shows the date and time as "11:05". There are several input fields and dropdown menus:

- "Part Number Responsible": A dropdown menu showing "TR4569".
- "Part Name": An input field containing "belt".
- "QTY": An input field containing "2".
- "Desc. code": A dropdown menu showing "G-General Repair".
- "Group Number Containing Part": An input field.
- "Group Name": An input field.
- "Did this incident make the product inoperable?": A dropdown menu showing a checked option.
- "Optional Comments": An input field.
- "Add": A button next to the optional comments field.

At the bottom of the screen are two buttons: "Back" and "Continue".

FIG. 22

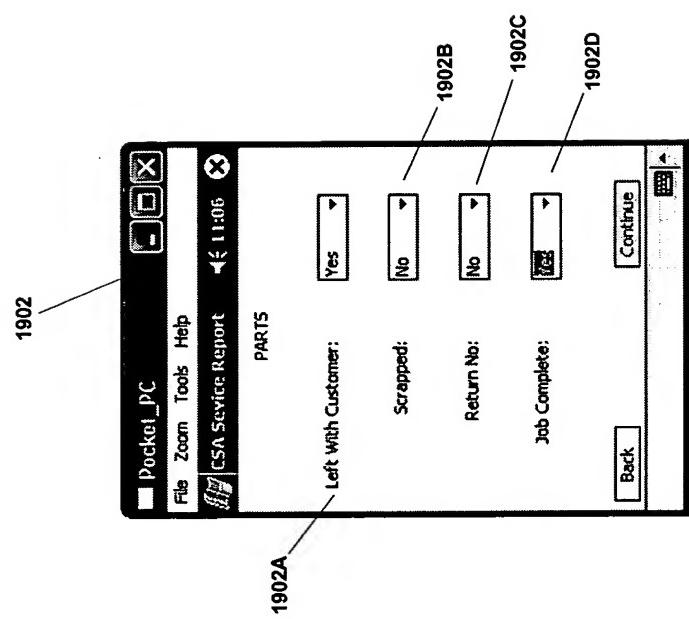


FIG. 23

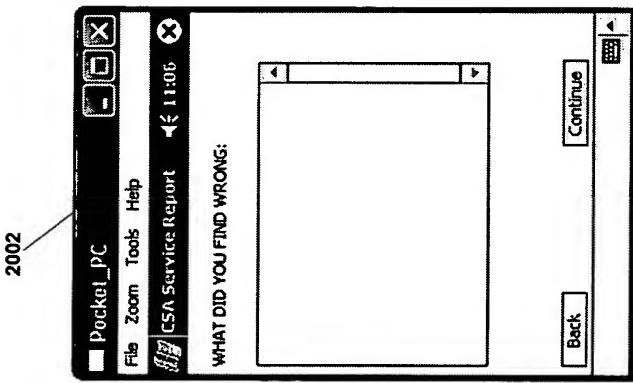


FIG. 24

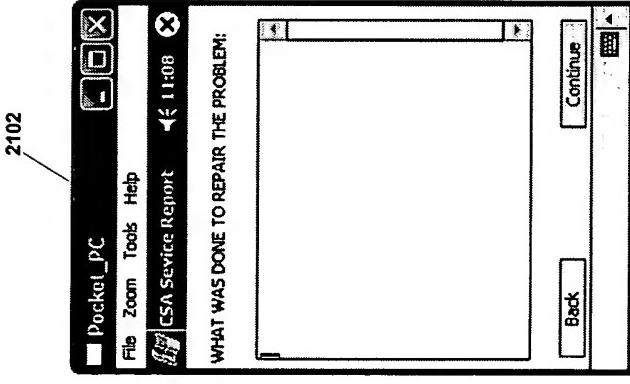


FIG. 25

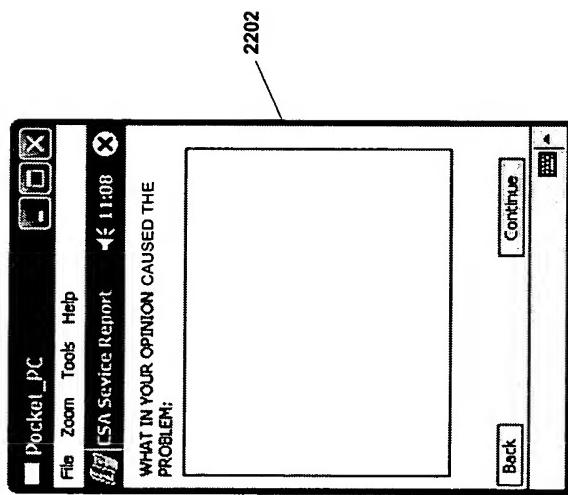


FIG. 26

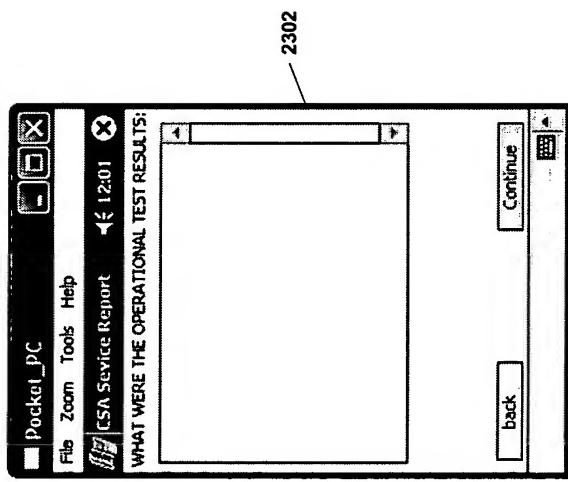


FIG. 27

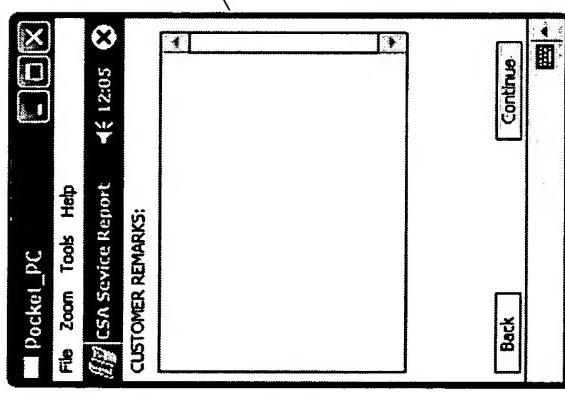


FIG. 28

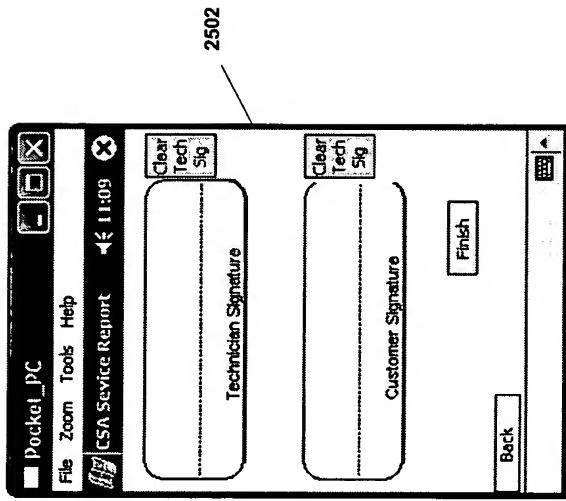


FIG. 29

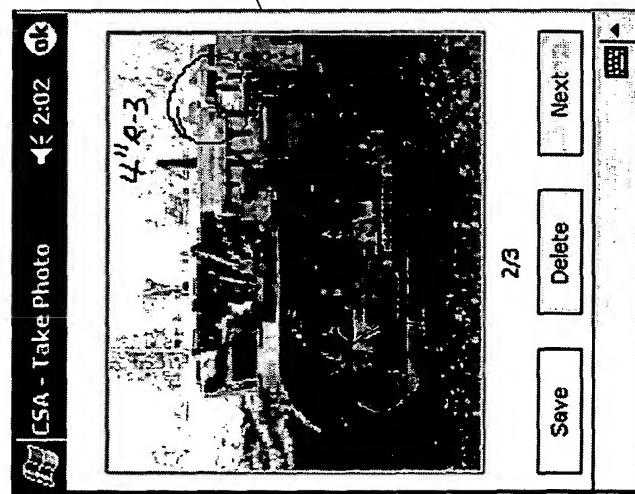


FIG. 30

Figure 32

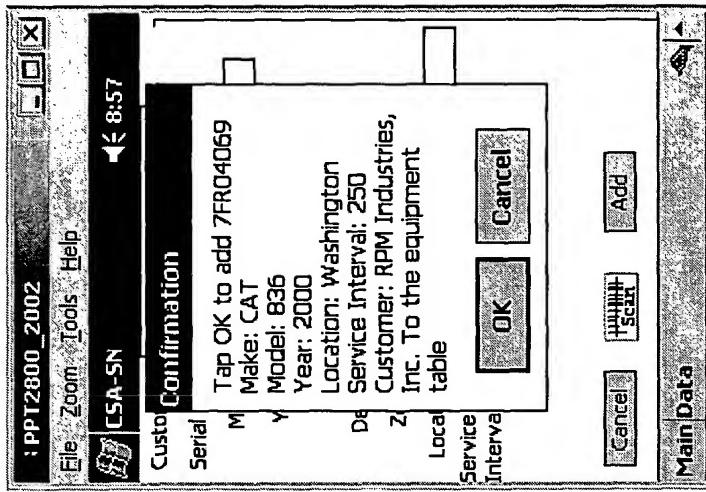


Figure 31

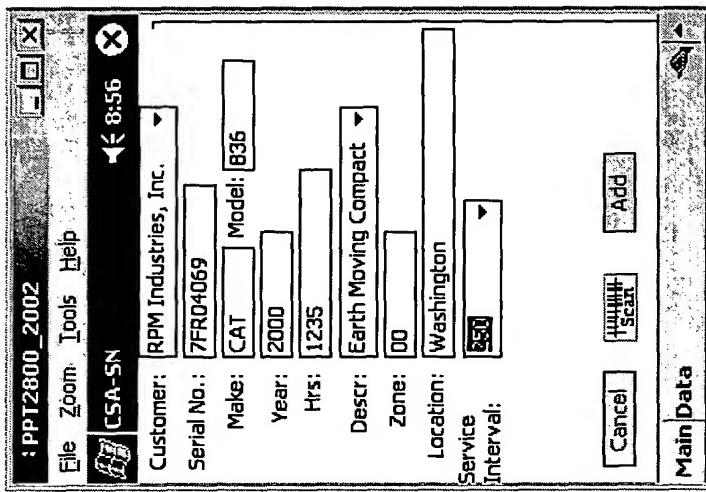


Fig. 33

: PPT2800_2002

File Zoom Tools Help

Power Systems 9:01 OK

*Engine SN: 4BK00679
Unit Site No: 07854

Site Address: 55 Hickory Street
Washington, PA 15301

Contact:
Phone:

Customer: RPM Industries, Inc. | 1

Back Continue

Fig. 34

: PPT2800_2002

File Zoom Tools Help

Power Systems 9:05 OK

Gen Make: CAT
Gen Model: 54162
Gen SN: 3B500645

Voltage: 220 Amps: 90
kW: 1250

Gen Spec:

Back Continue

Fig. 35

: PPT2800_2002

File Zoom Tools Help

Power Systems 10:16 OK

Air Filter Make: FRAM
Air Filter PN: 123-4567
Air Filter QTY: 2

Oil Filter Make: FRAM
Oil Filter PN: 987-6543
Oil Filter QTY: 4

Back Continue

Fig. 36

: PPT2800_2002

File Zoom Tools Help

Power Systems 10:18 OK

Primary

Fuel Filter Make:

Fuel Filter PN:

Fuel Filter Qty:

Secondary

Fuel Filter Make:

Fuel Filter PN:

Fuel Filter Qty:

Back Continue

Fig. 37

: PPT2800_2002

File Zoom Tools Help

Power Systems 10:18 OK

Belt:

Belt Make:

Belt PN:

Belt Qty:

Oil / Coolant

Oil Type:

Oil Qty:

Coolant Qty:

Back Continue

Fig. 38

: PPT2800_2002

File Zoom Tools Help

Power Systems 10:19 OK

Battery Charger

Bat Chrg Make:

Bat Chgr Model:

Bat Chgr SN:

Input Volts:

Output Volts:

Output Amps:

Back Continue

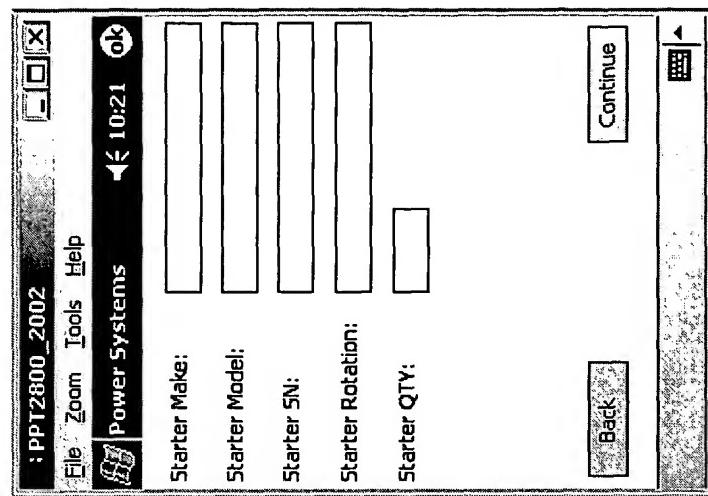


Fig. 41

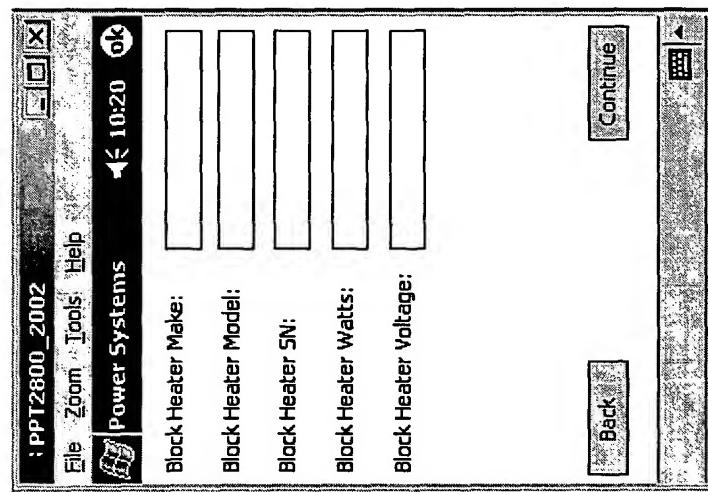


Fig. 40

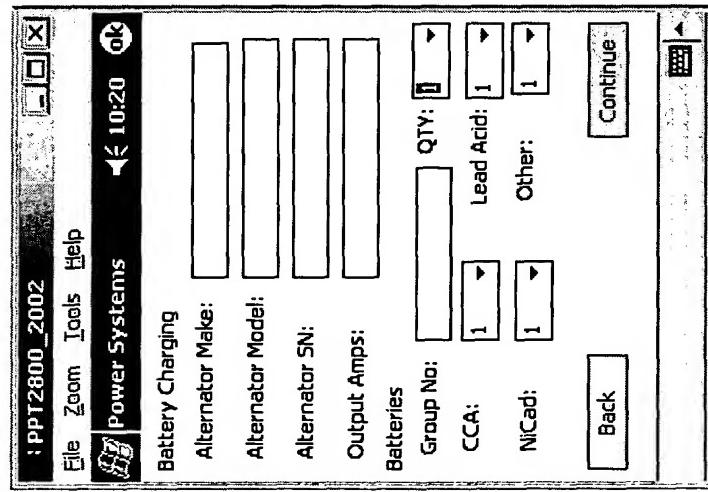


Fig. 39

Fig. 42

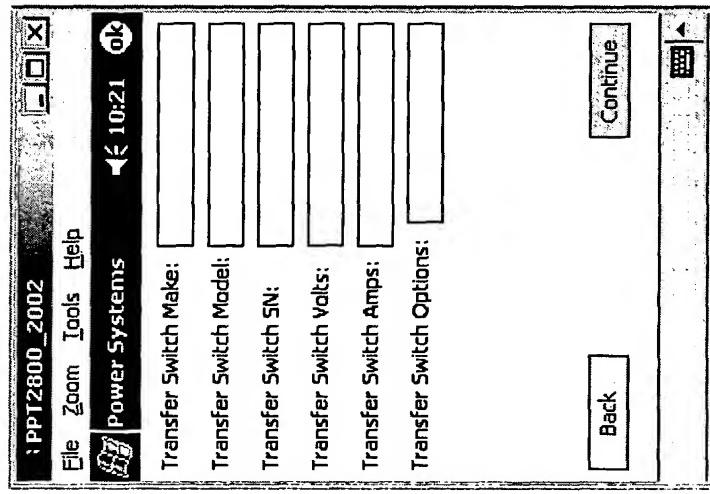


Fig. 43

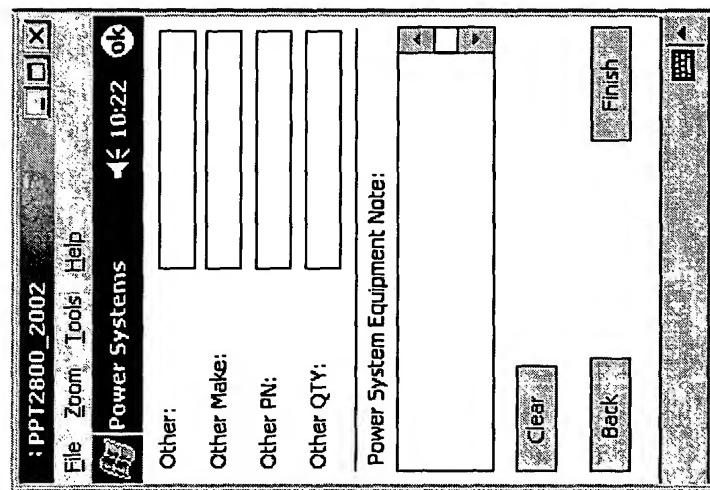
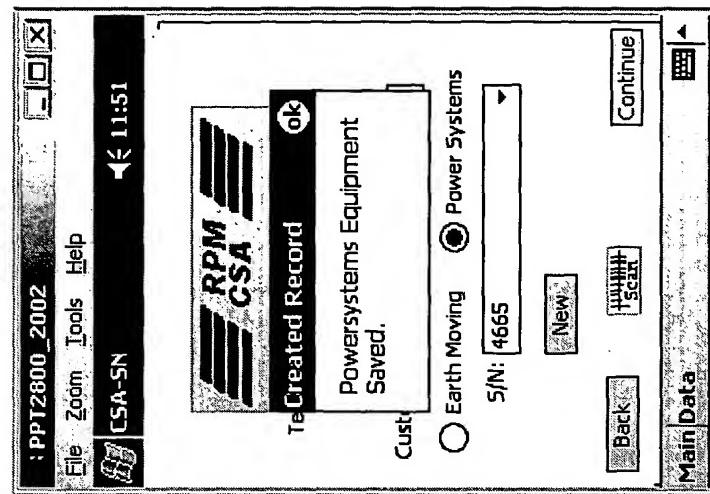


Fig. 44



Question 8: Sample screen displays specific to performing an unassigned work order function with the PDA.

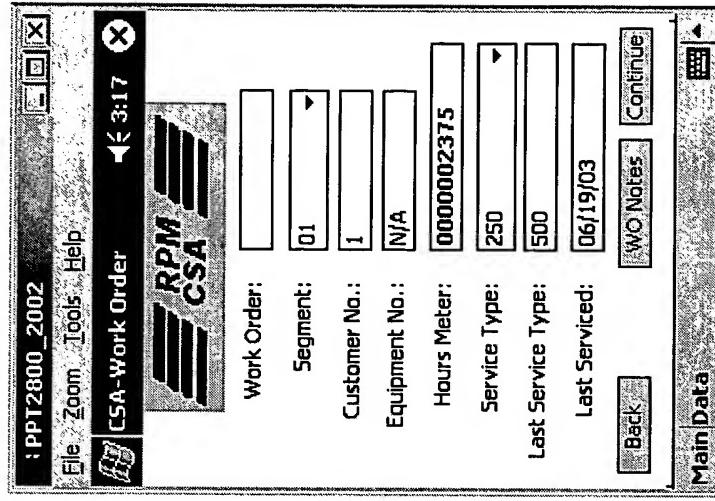
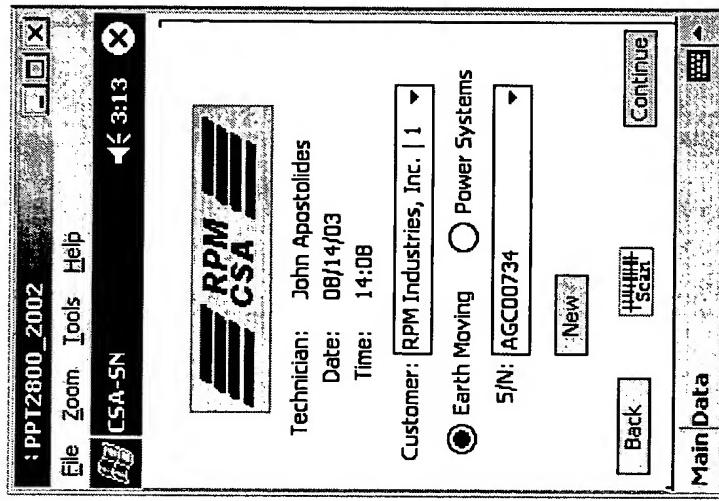


Fig. 45

Fig. 46

Fig. 48

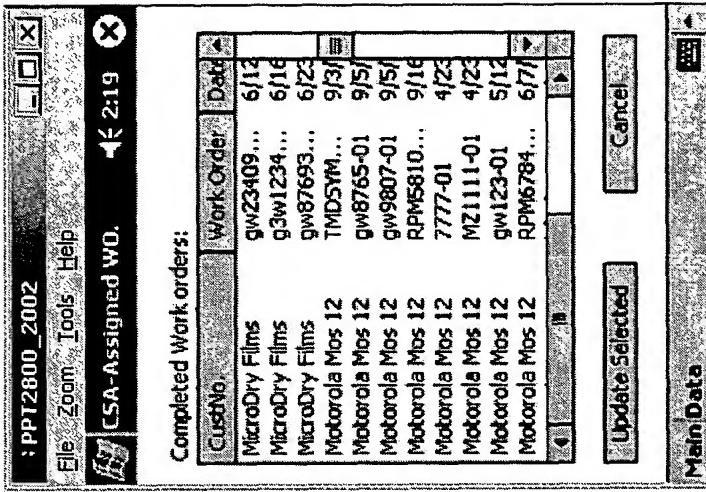


Fig. 47

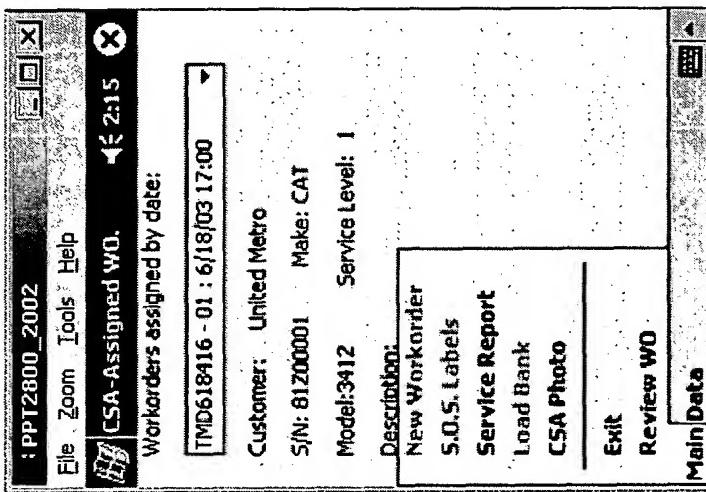


Fig. 51

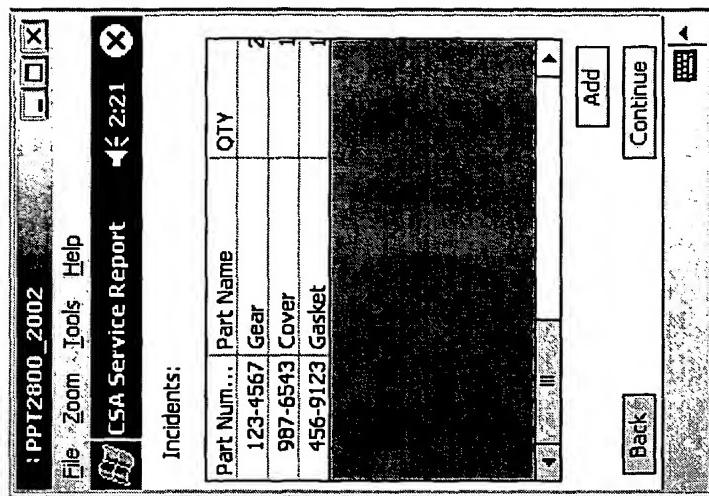


Fig. 50

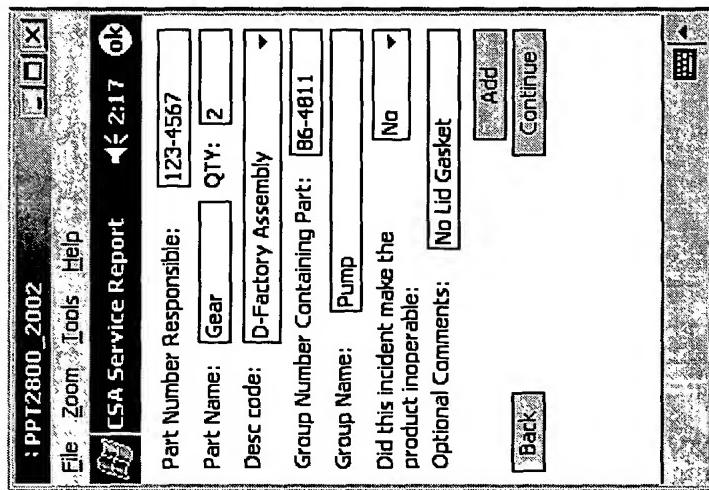
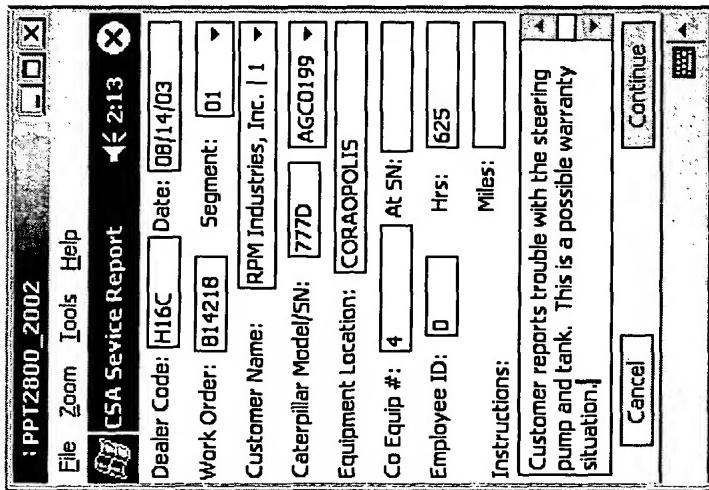


Fig. 49



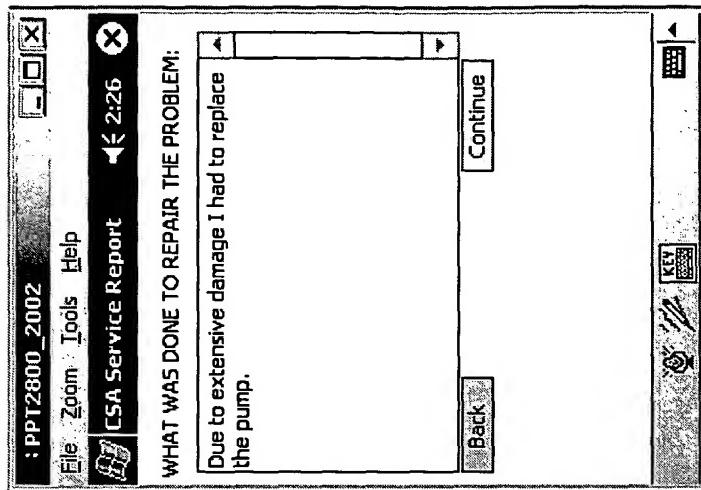
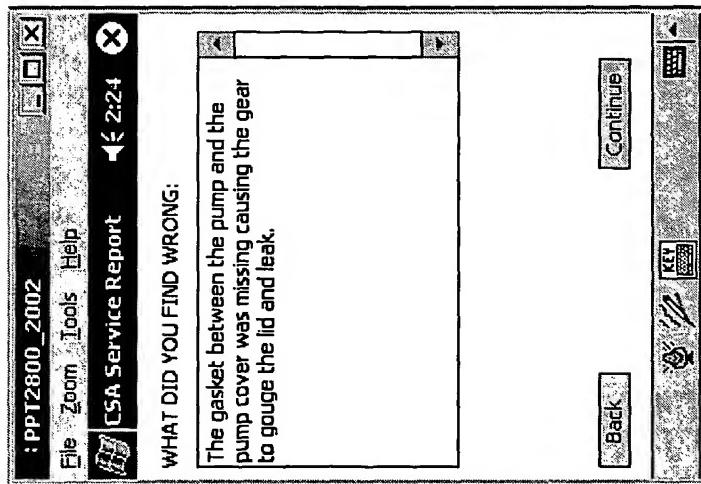
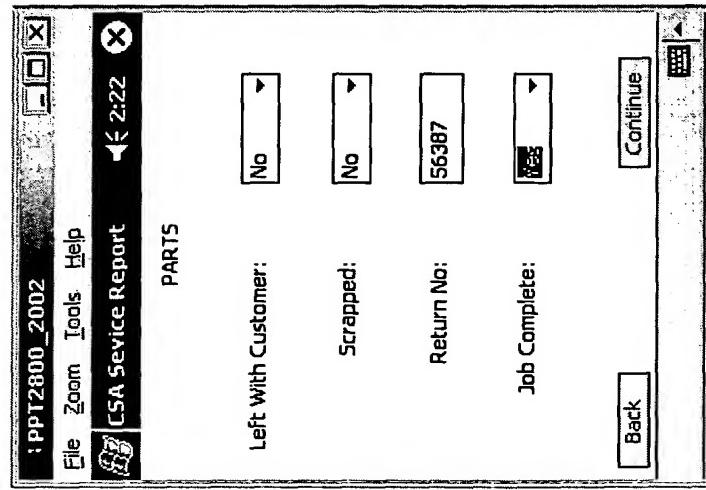


Fig. 52

Fig. 53

Fig. 54

Fig. 57

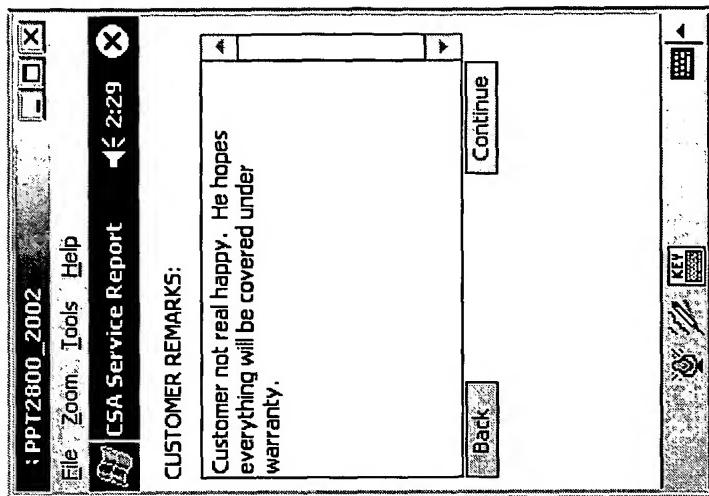


Fig. 56

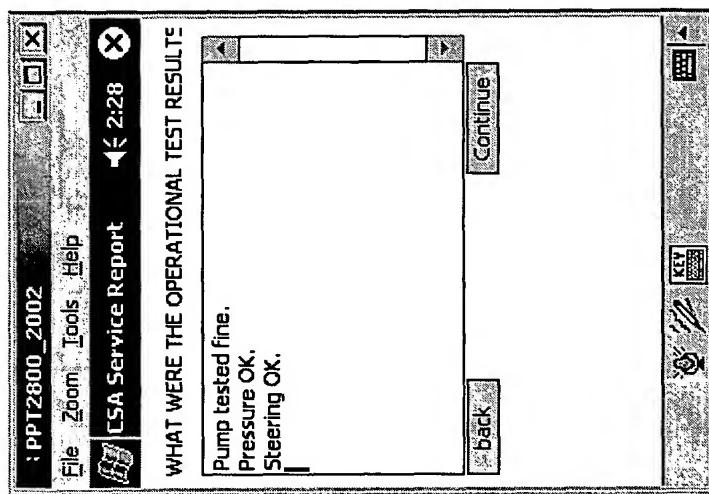


Fig. 55

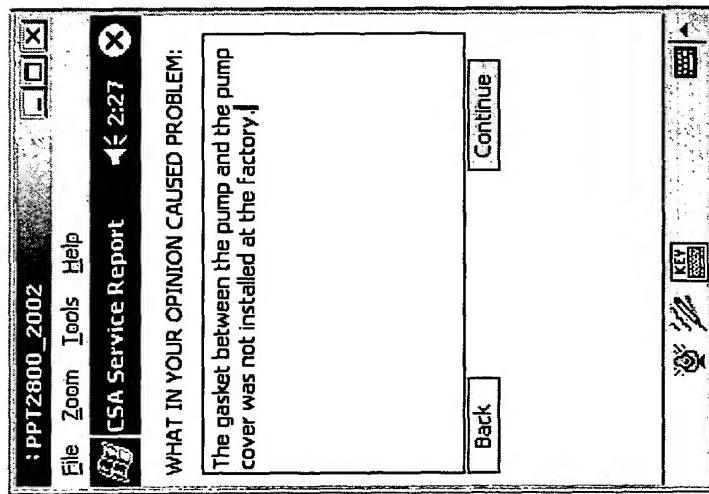


Fig. 59

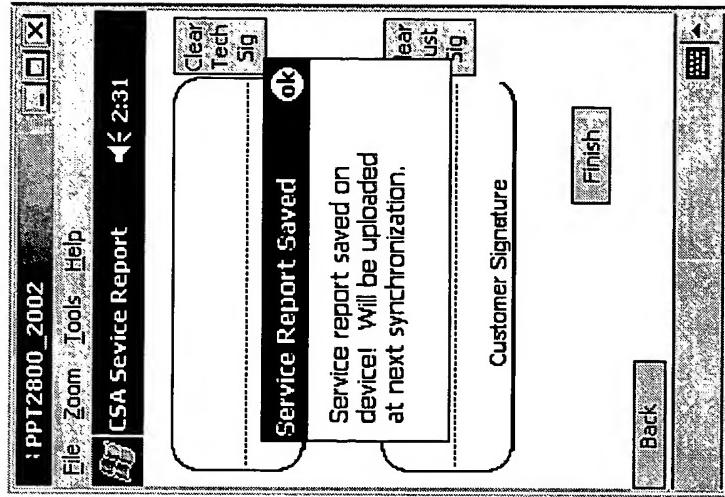
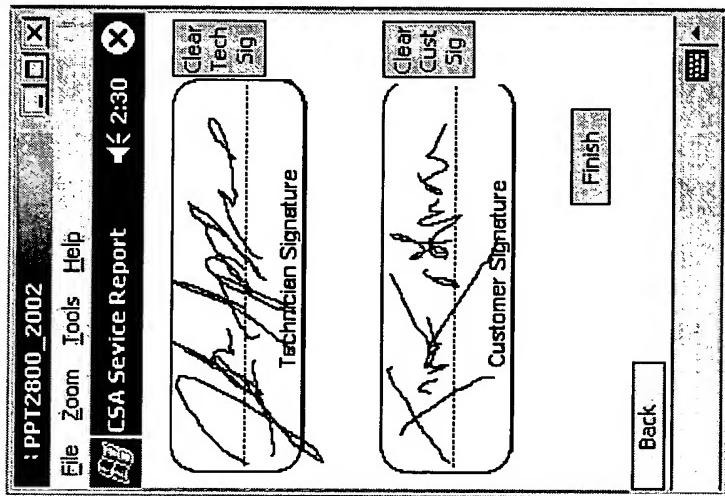


Fig. 58



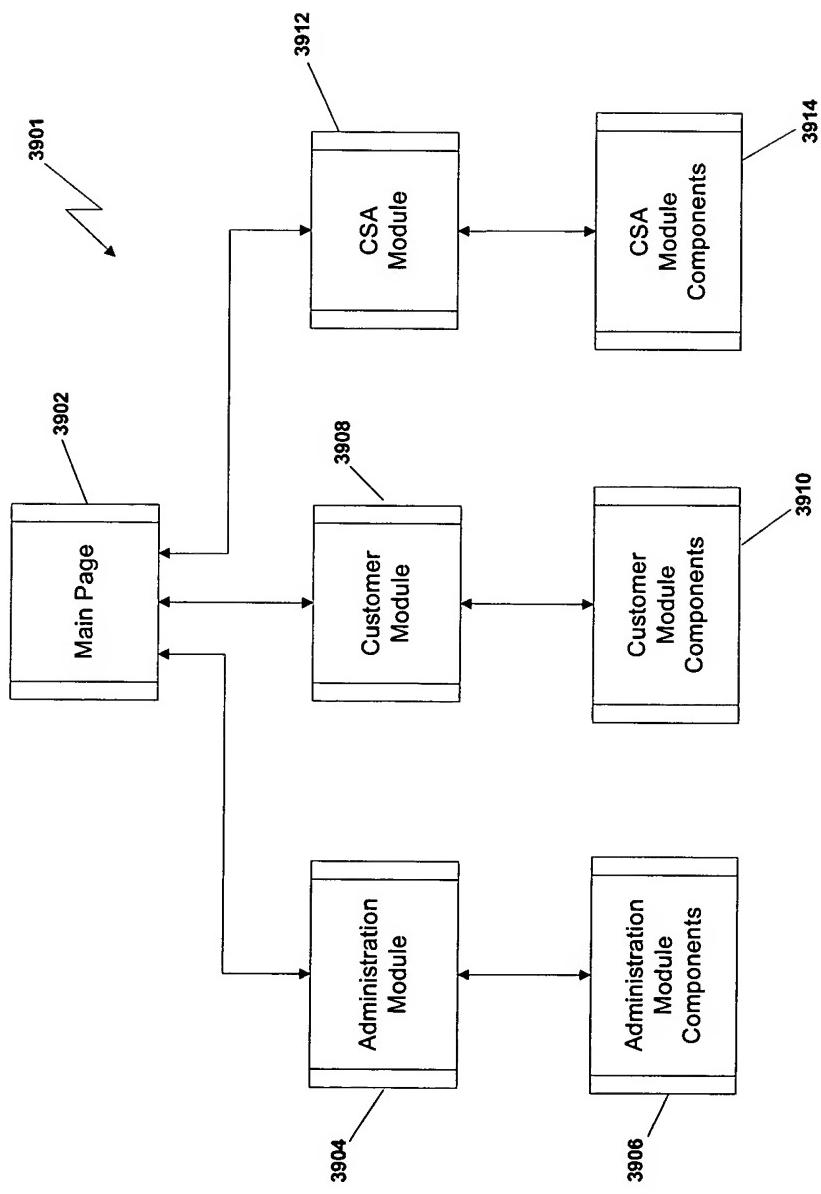


FIG. 60

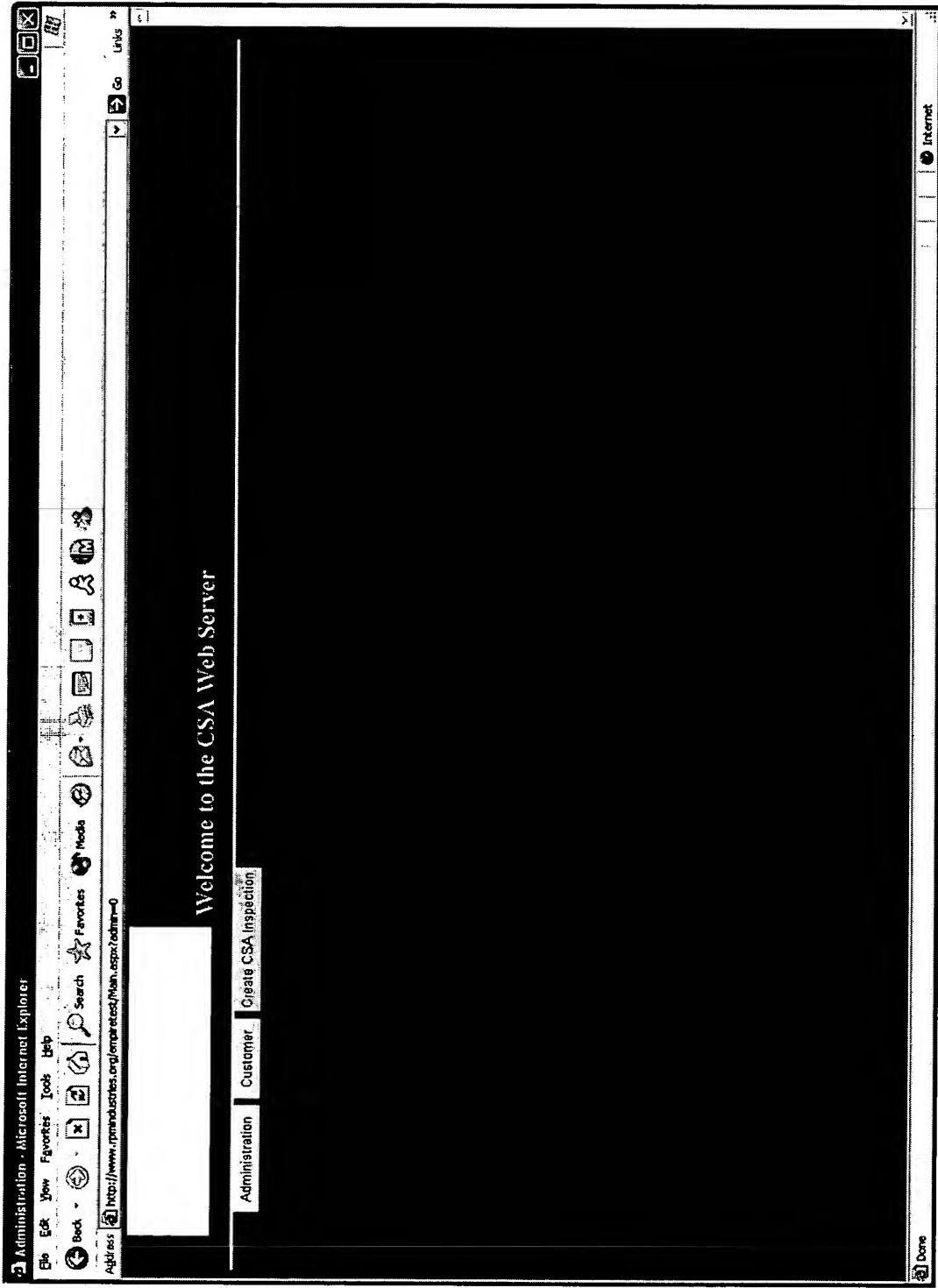


FIG. 61

4002

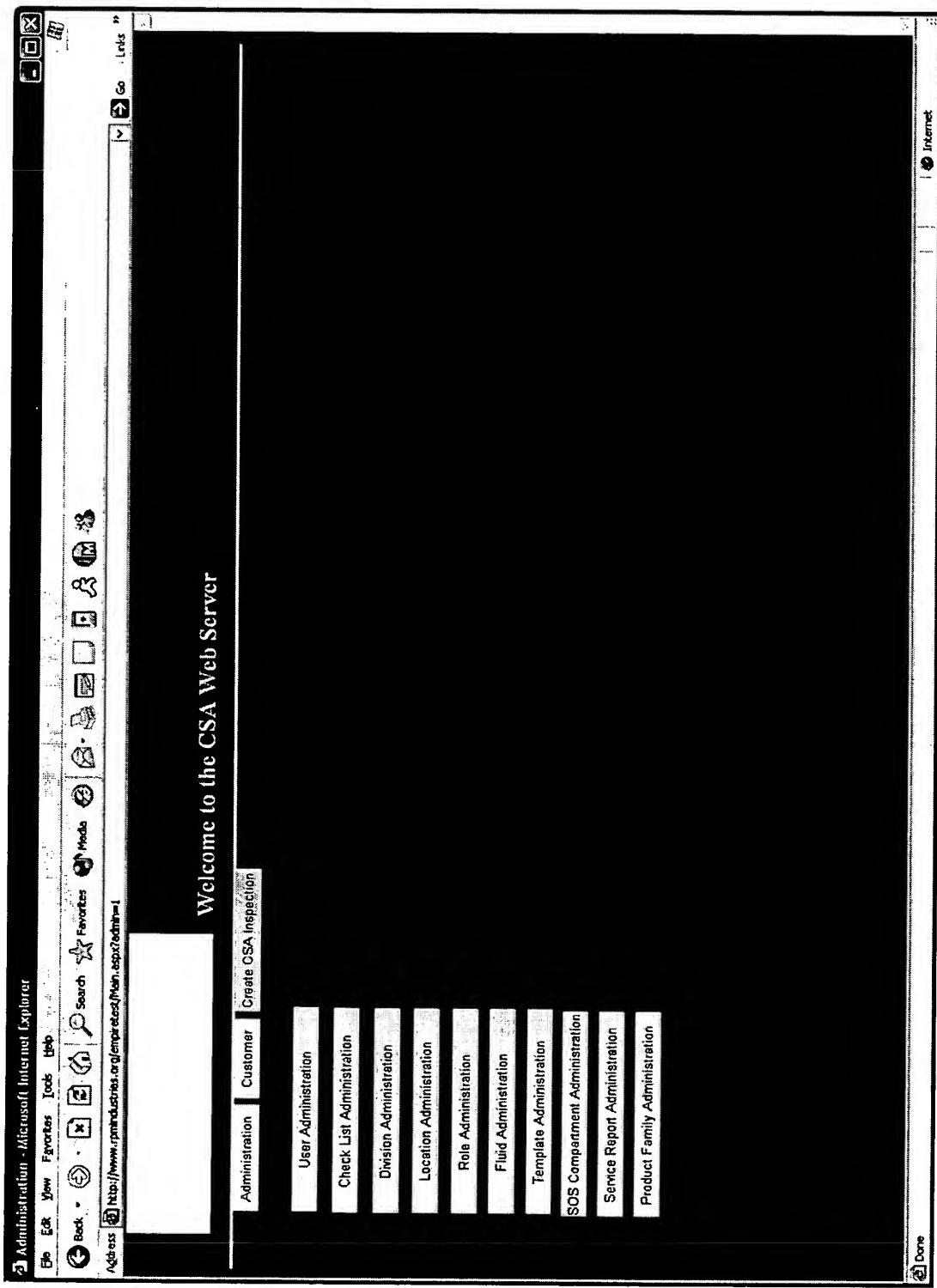


FIG. 62

4102

User Administration - Microsoft Internet Explorer

File Edit View Favorites Help

Back × Home Search Favorites Mode Mode Mode Mode Mode Mode Mode Mode

Address http://www.pmtactivities.org/enterprise/UserAdmin.aspx

User Administration

Administration Customer Create CSA Inspection Add User

Employee ID	First Name	Last Name	User Name	Role	Email	Division	Active
	John	EATIRE RENTAL	ja	Tech		Earth Moving	True
	Thomas	test	ei	Tech		Earth Moving	True
	Mike	test	mstevens	Tech		Earth Moving	True
	Yeon	test	kkrauch	Teeth		Earth Moving	True
	Sue	test	sforest	Admin		Earth Moving	True
	Will	PHOENIX	wong	tech		EPS Phoenix	True
	Carole	PHOENIX	ccleek	Client		Earth System	True
	Clay	EATIRE MACHINERY	chanelley	Tech		Earth Moving	False

SOS Compartment Admin
Template Admin
Service Report Admin

(2) Done Internet

FIG. 63

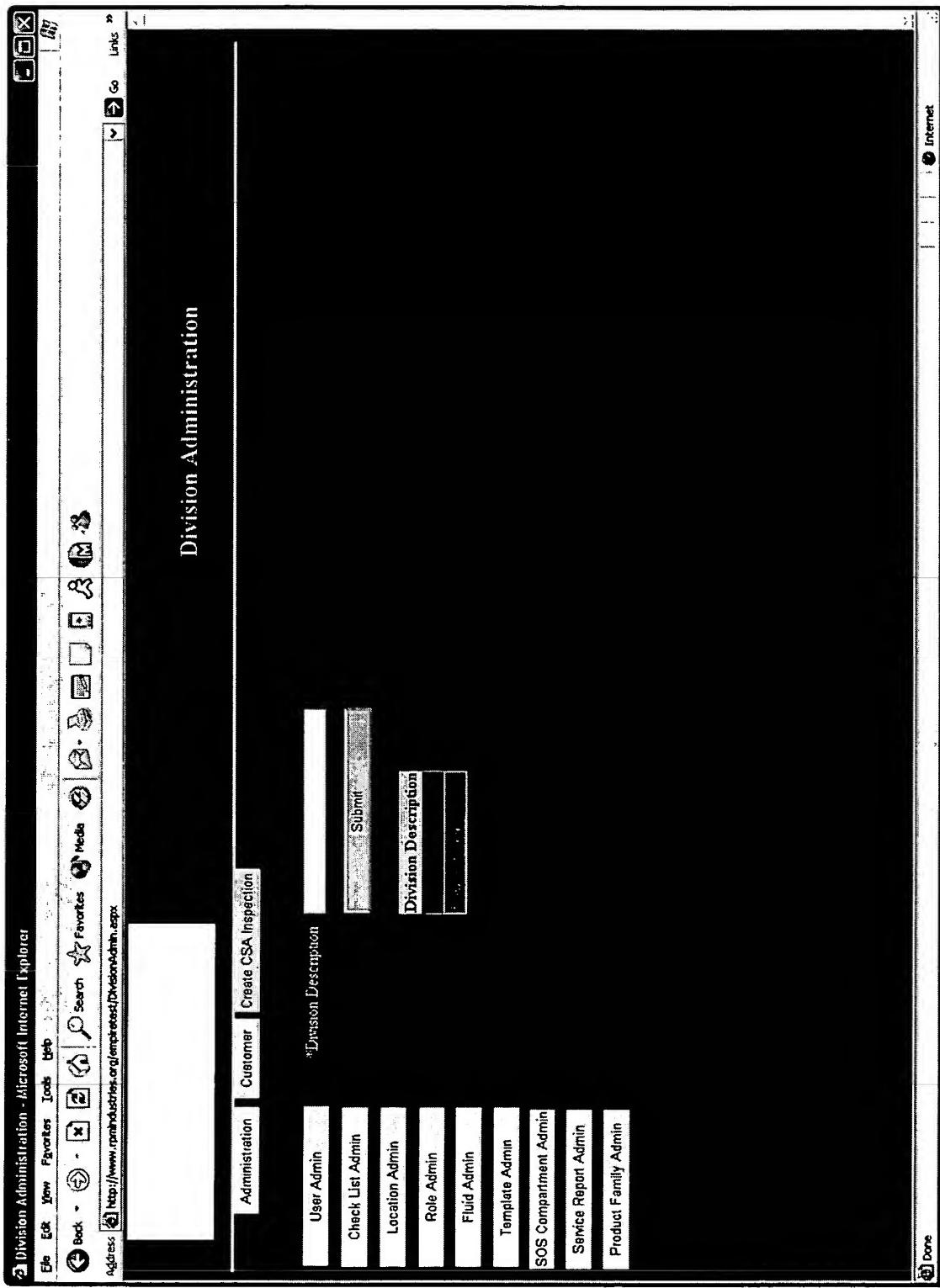


FIG. 64

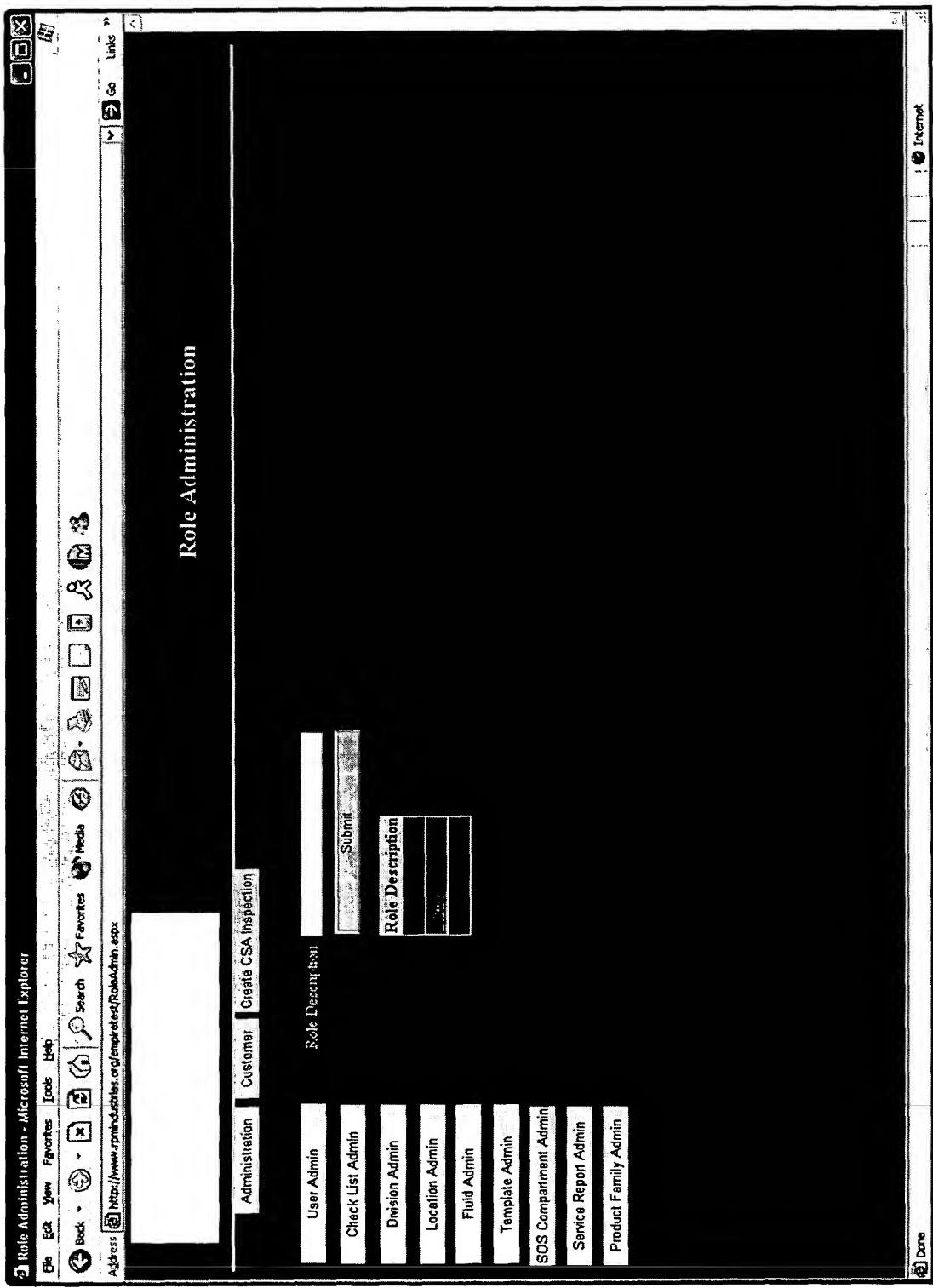


FIG. 65

4402

Fluid Administration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back × Home Search Favorites Mode Help

Address: http://www.ipmibusinesses.org/test/FluidAdmin.aspx

Fluid Administration

Favorites

Add Fluid Add Viscosity

Administration Customer Create CSA Inspection

Fuels:

User Admin	Fluid ID/Brand	Type	Description
Delete	CAT Arctic DEO SYNTM	Gear Oil	Synthetic Diesel Engine Oil
Delete	CAT Arctic GO	(Gear Oil)	(Gear Oil)
Delete	CAT Arctic HYTOOL	(Hydraulic Oil)	(Hydraulic Oil)
Delete	CAT Arctic HYTOOL	(Transmission and Drive Train Oil)	(Transmission and Drive Train Oil)
Delete	CAT Arctic TDTCOM	(Transmission and Drive Train Oil)	(Transmission and Drive Train Oil)
Delete	CAT Brake Lander Brake	Anti-Skid	Brake Lander Brake Anti-Skid
Delete	CAT DEACUM	Coolant	Diesel Engine Antifreeze Coolant
Delete	CAT DECOM	(Diesel Engine Oil)	(Diesel Engine Oil)
Delete	CAT DEOCYTM	(Synthetic Diesel Engine Oil)	(Synthetic Diesel Engine Oil)
Delete	CAT ELCYM	(Extreme Life Coolant)	Extreme Life Coolant
Delete	CAT ELCYCEXTR	Extender	Extreme Life Coolant Extender
Delete	CAT FDAD SYNTM	(Synthetic Final Drive and Axle Oil)	(Synthetic Final Drive and Axle Oil)
Delete	CAT FDACUM	(Final Drive and Axle Oil)	(Final Drive and Axle Oil)
Delete	CAT FDAO+MA	(Final Drive and Axle Oil Plus)	(Final Drive and Axle Oil Plus)
Delete	CAT FG	(Gear Oil)	(Gear Oil)

Viscosity:

Viscosity ID	Viscosity Sort
5W	1
15W40L	2
50W	3
50W	4

FIG. 66

4502

Fig. 67

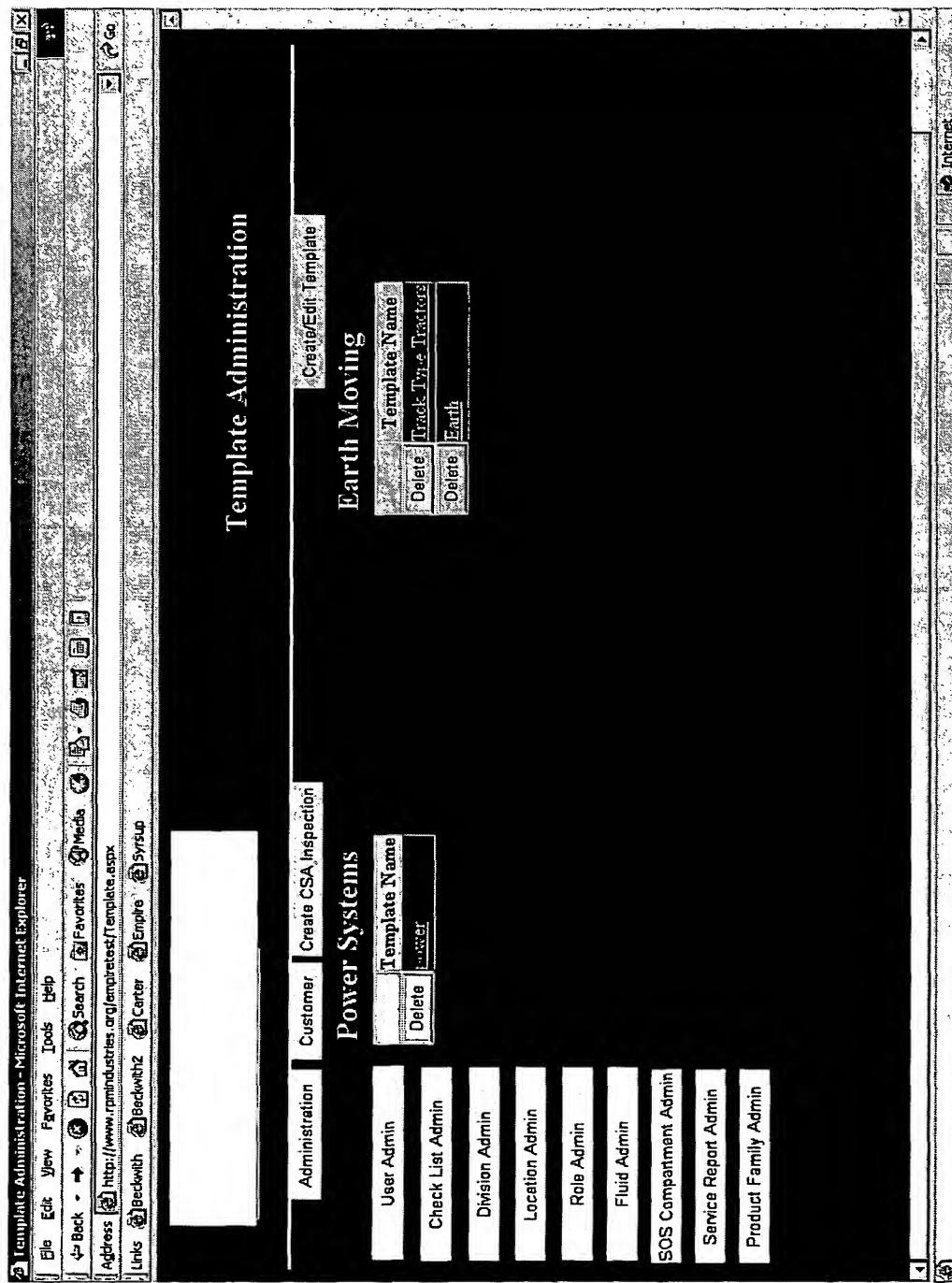


Fig. 68

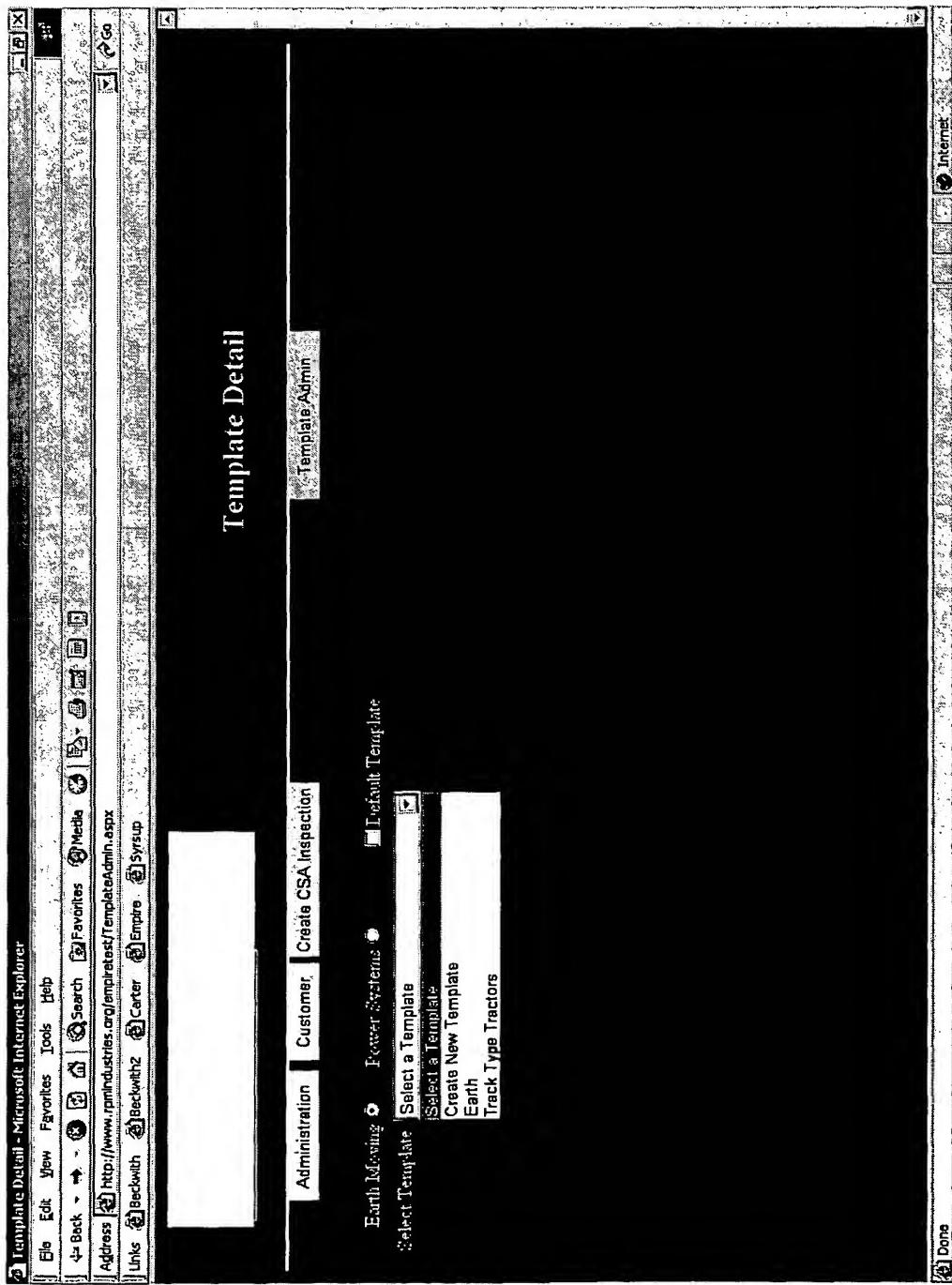


Fig. 69

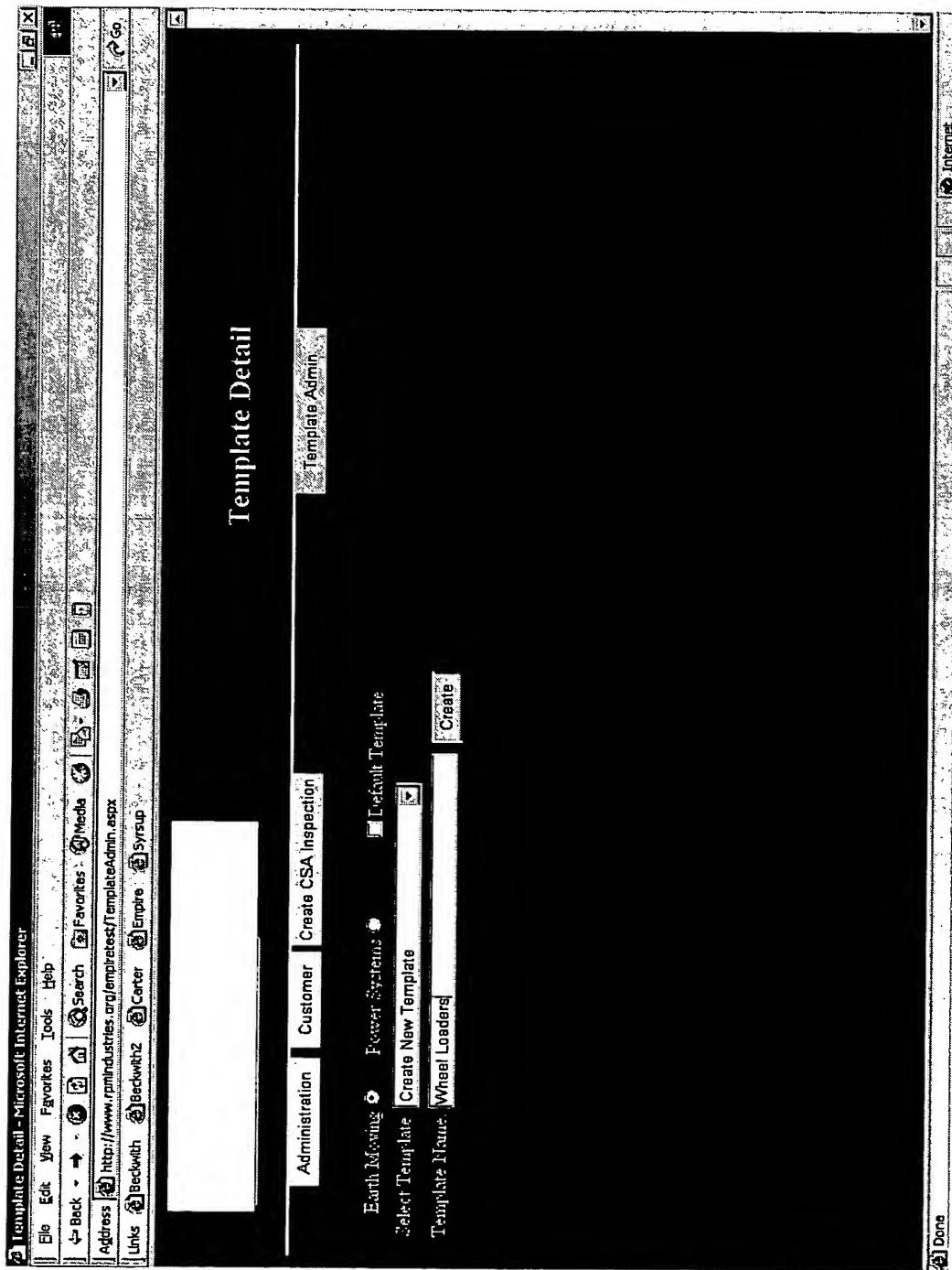


Fig. 70

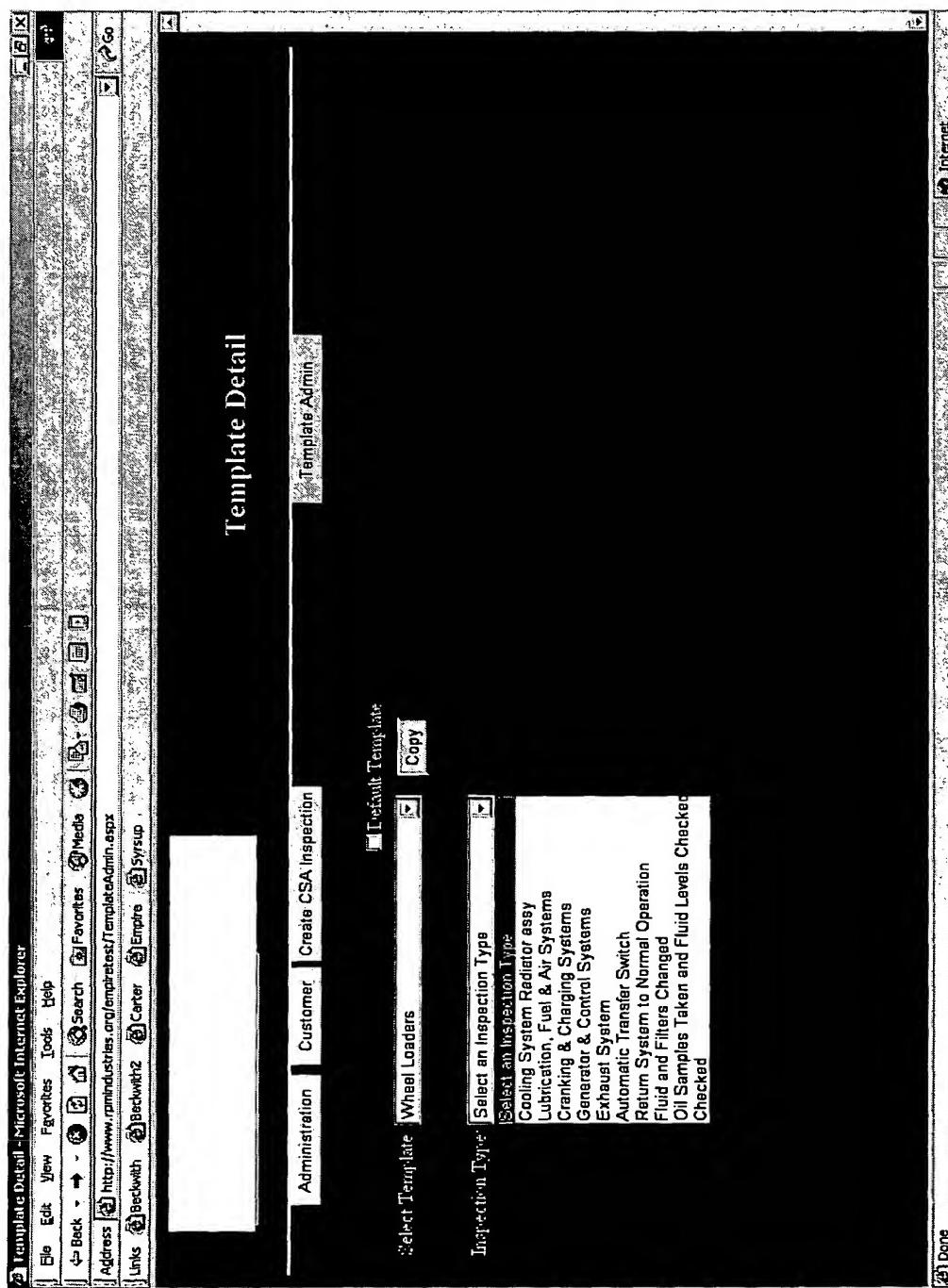


Fig. 71

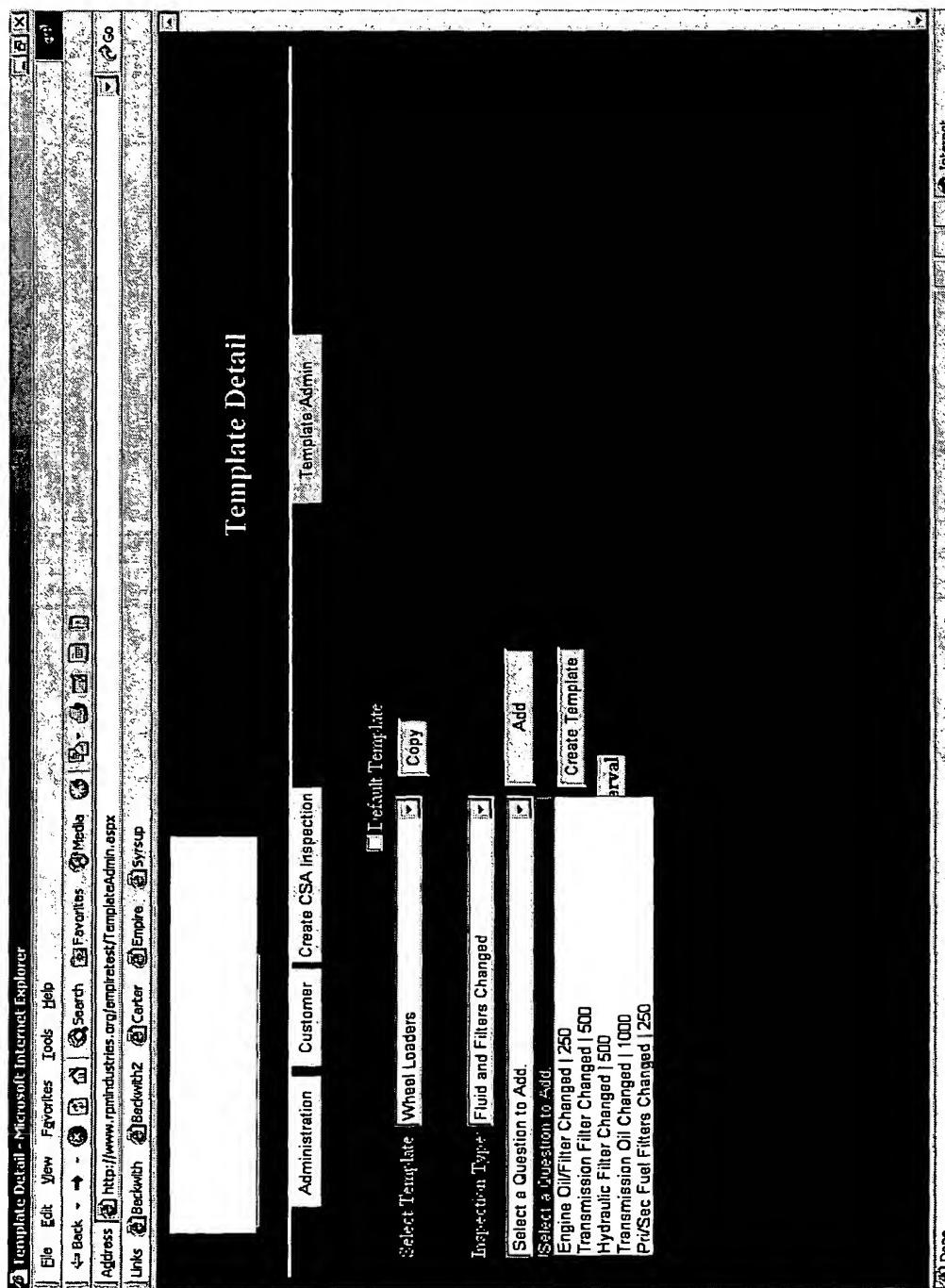


Fig. 72

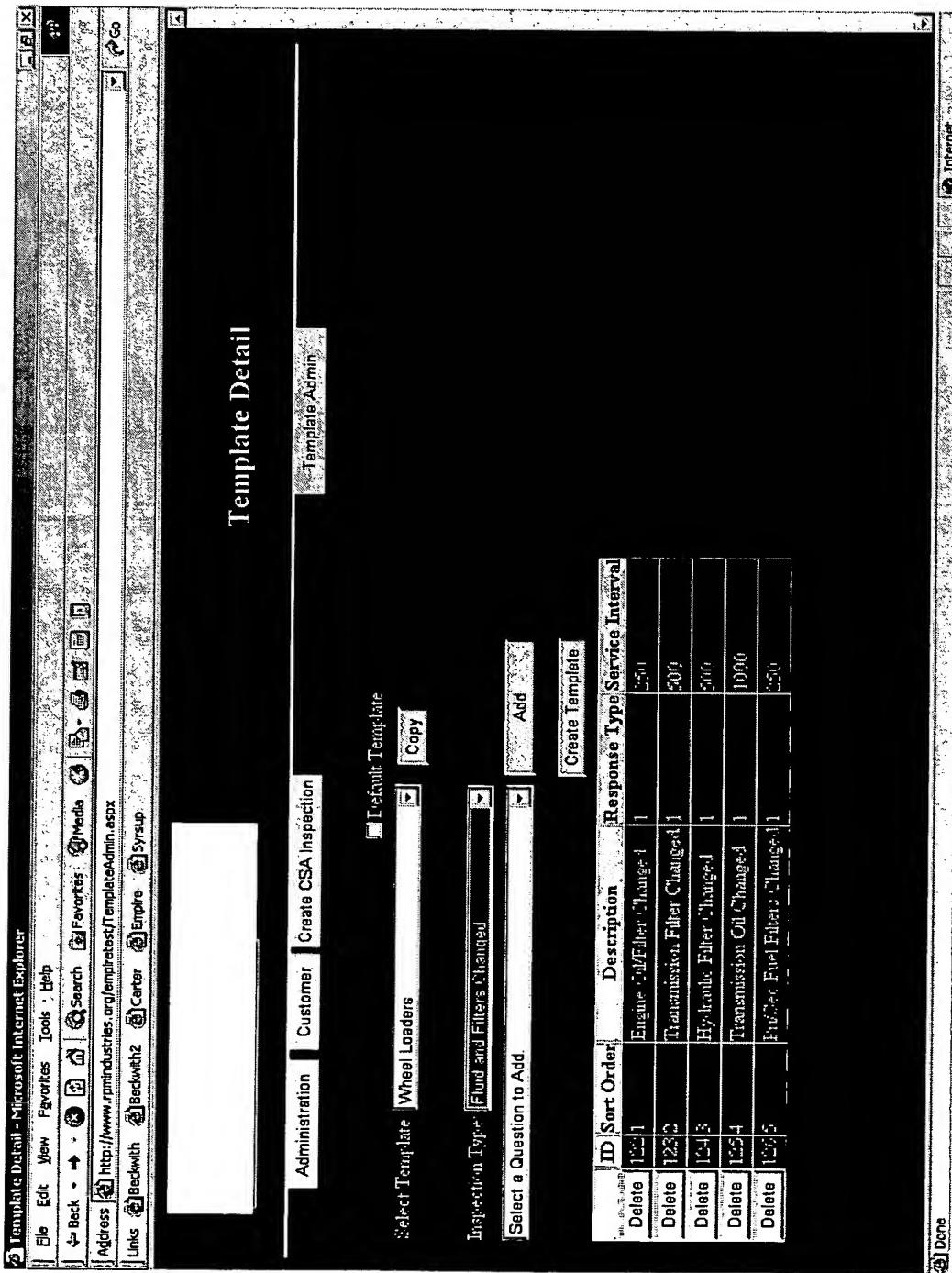
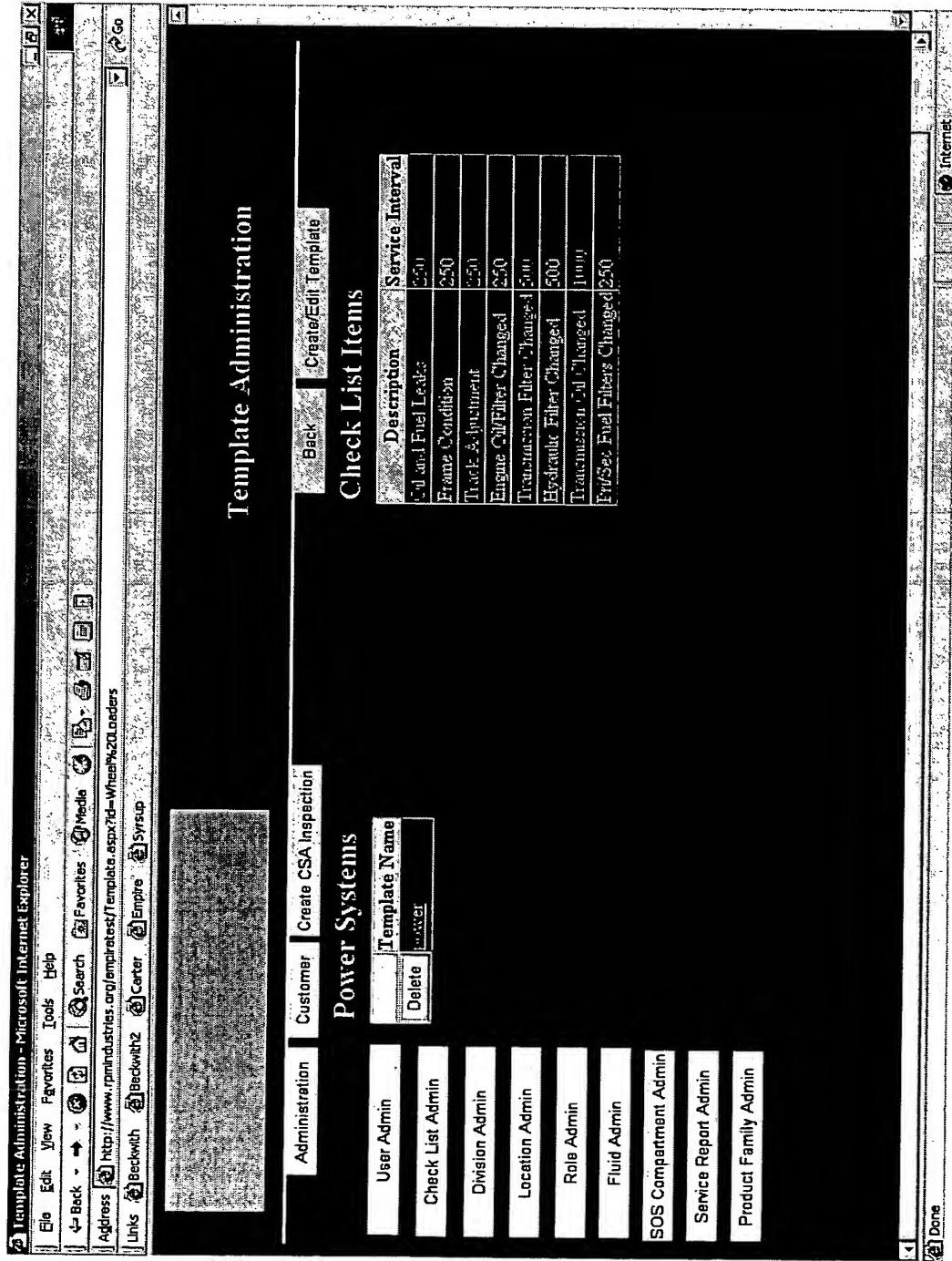


Fig. 73



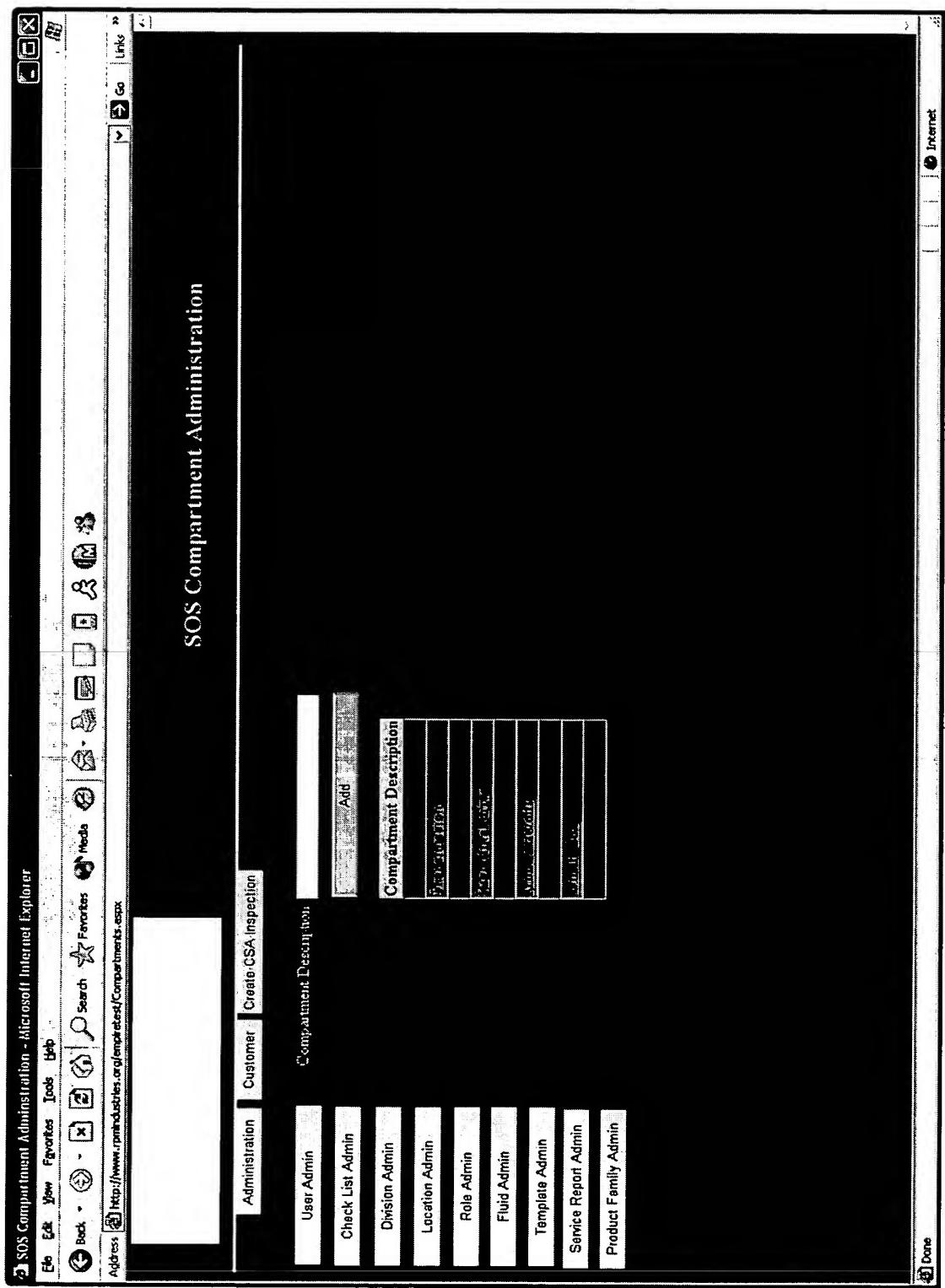


FIG.74

4702

Description Code Administration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Search Favorites Mode Help

Address: <http://www.primadacthes.org/dmtest/SERVICEReportData.aspx>

Description Code Administration

Code	Description	Response	Active
Structural	1	True	<input checked="" type="checkbox"/>
Surface	2	True	<input checked="" type="checkbox"/>
Leather	3	True	<input checked="" type="checkbox"/>
Factory Assembly	4	True	<input checked="" type="checkbox"/>
System Manufacture	5	True	<input checked="" type="checkbox"/>
Factory Shipping	6	True	<input checked="" type="checkbox"/>
General Repair	7	True	<input checked="" type="checkbox"/>
Adjustment	8	True	<input checked="" type="checkbox"/>
Serviceability	9	True	<input checked="" type="checkbox"/>
Abuse	0	True	<input checked="" type="checkbox"/>

User Admin Customer Create CSA Inspection

Administration Check List Admin Division Admin Location Admin Role Admin

Fluid Admin Template Admin SOS Compartment Admin Product Family Admin

Done

FIG. 75

4802

Product Family Administration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back × Home Stop Refresh Search Favorites Mode Help

Address: http://www.ipmproducts.org/templatetest/ProductFamily.aspx

Links Go

Product Family Administration

Product ID	Description
	Under-ground Articulated Truck
	Articulated Dump Truck
	Asphalt Paver
	Backhoe Loader
	Challenger
	Cold Planer
	Combi:
	Earth Moving Compactor
	Excavator Support Track
	Excavator
	Forest Products
	Generator
	Integrated Tool Carrier
	Land Haul Dumper
	Liquid-Hydraulic Excavator
	Motor Grader
	Off Highway Truck-Tractor
	Paving Compactor
	Pipe Layer
	Road Reclamation Soil Stabilizer
	Skid Steer Loader

FIG. 76

4902

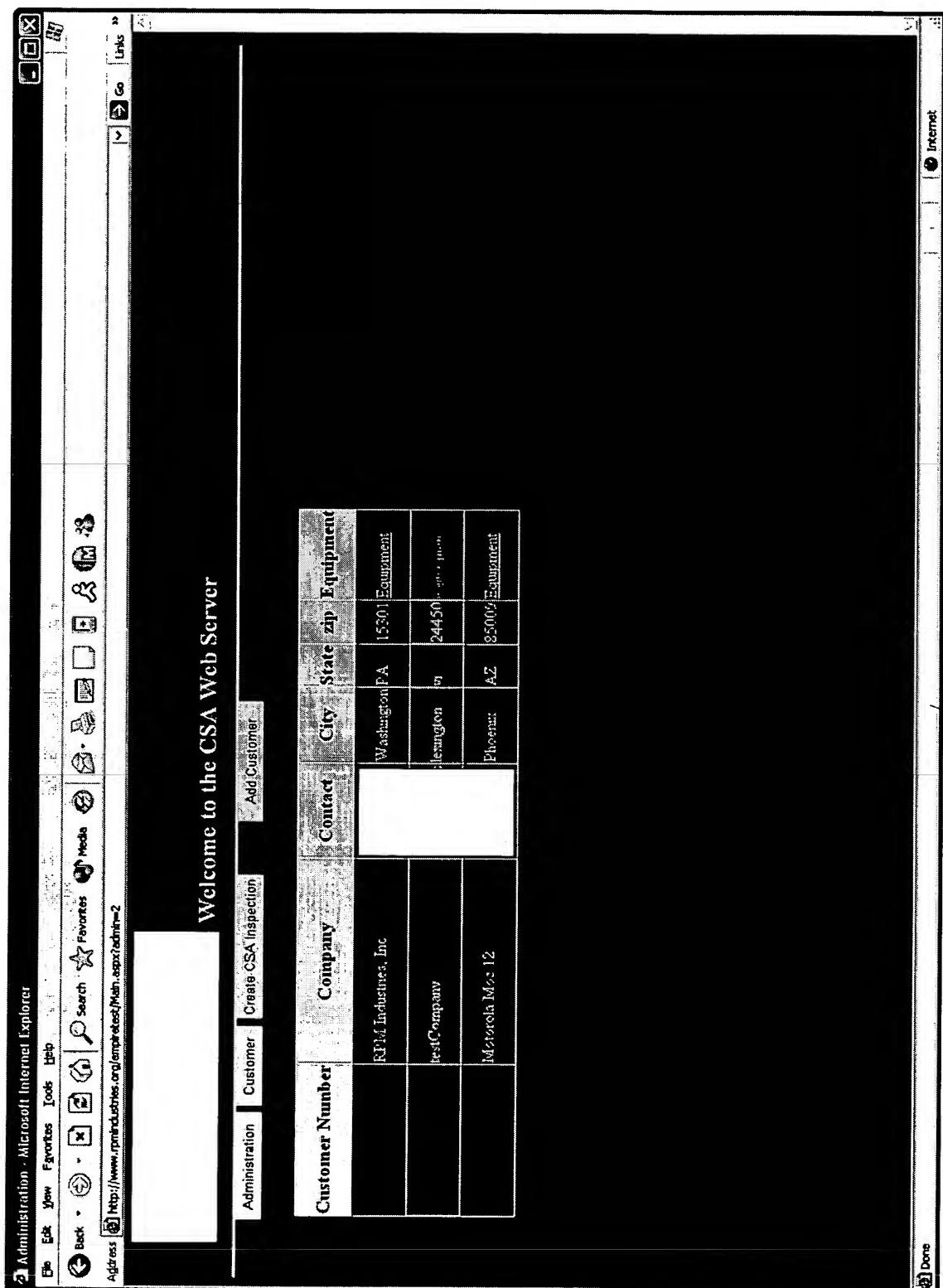


FIG. 77

FIG. 78

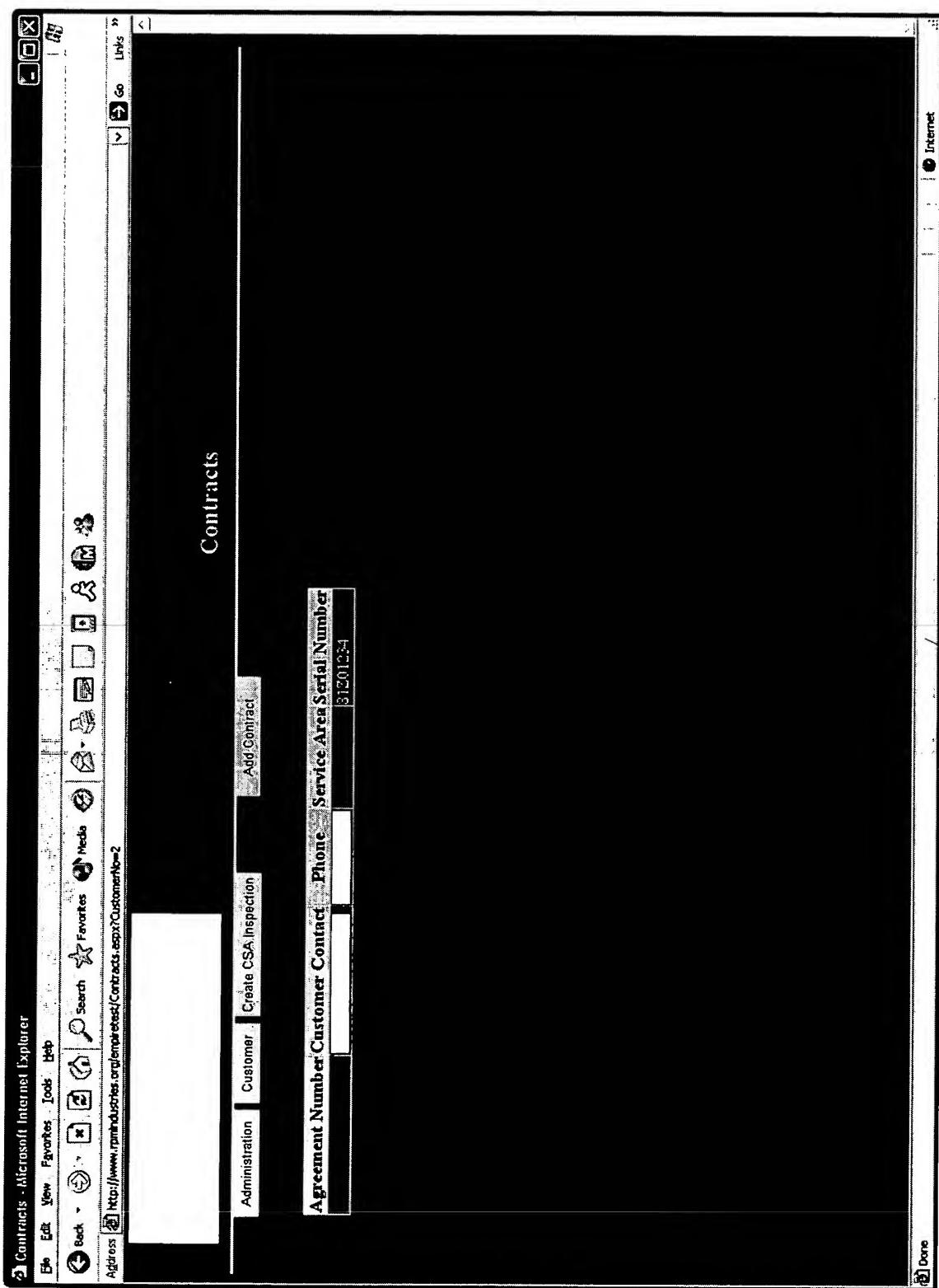


FIG.79

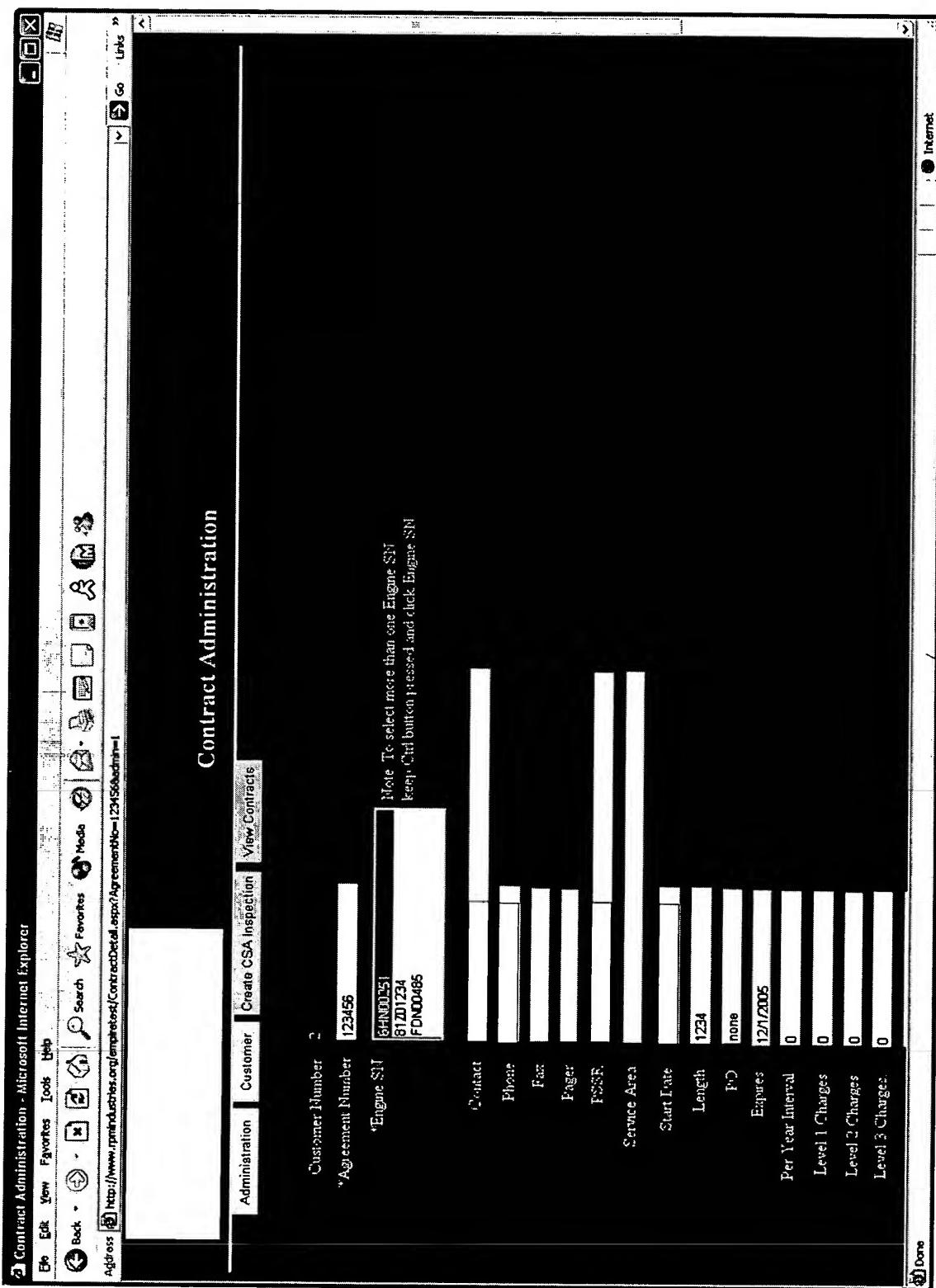


FIG. 80

5302

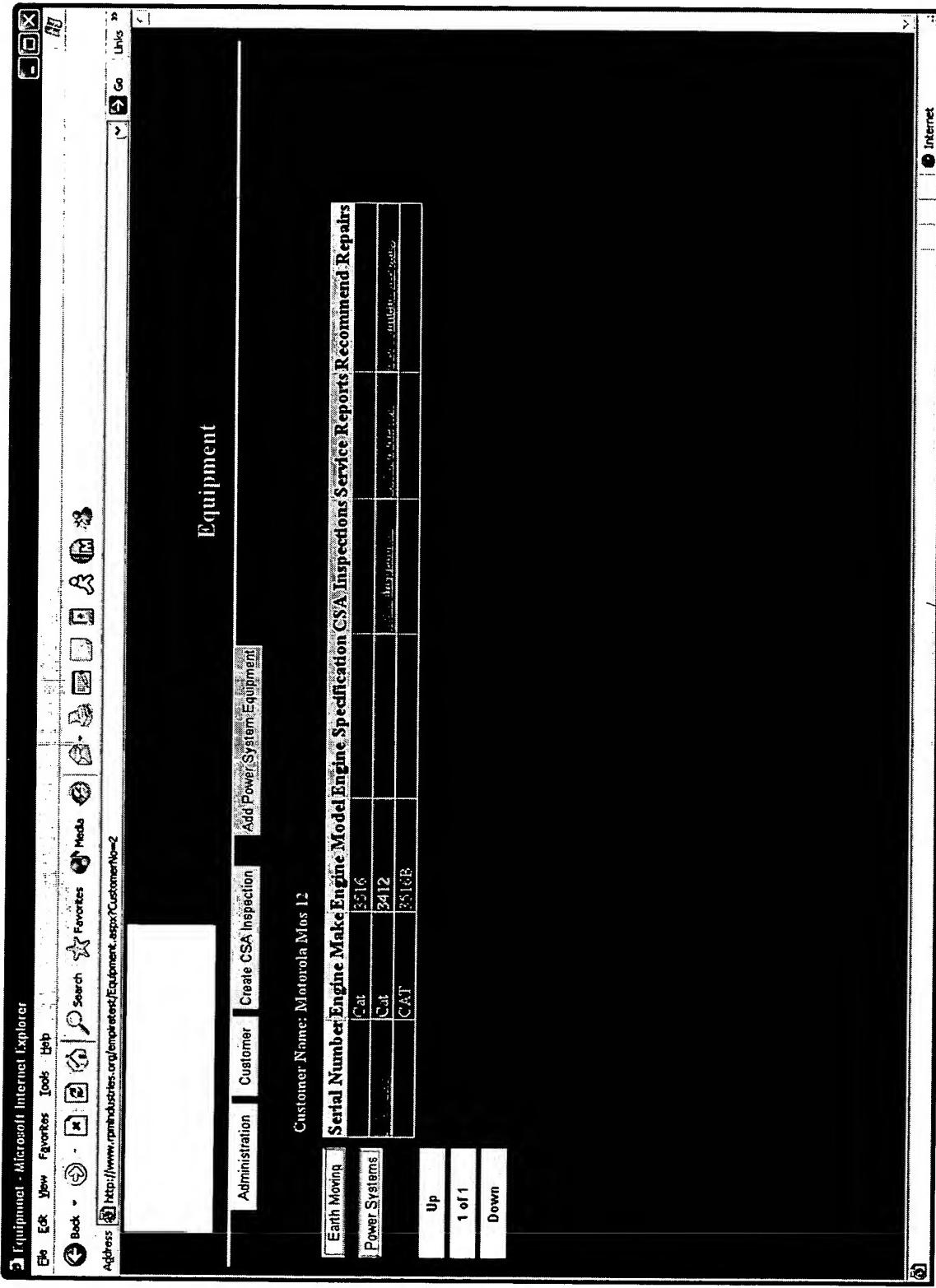


FIG. 81

5402

Equipment Detail - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Search Favorites Mode Favorites Links

Address: http://www.rpmindustries.org/joomla3/st3/EquipmentDetail.aspx?SerialNumber=3CR01256

Equipment Detail

Administration Customer Create CSA Inspection Equipment Admin

Equipment Number	3
*Serial Number	3CR01256
Make	CAT
Model	320BL
Year	1999
Description	Underground Articulated Truck
Customer Number	1
Customer Name	RPM Industries, Inc.
Location	WASHINGTON
Equipment Zone	1
Last Service Type	250
Last Service Date	9/14/2001 5:55:00 PM
Meter Reading	257
Service Interval	250

Submit Done

FIG. 82

5502

Power Systems Equipment Detail - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back × Forward Stop Search Favorites Media Favorites Home

Address: <http://www.motorcheck.org/empiretech/EquipmentDetail.aspx?SerialNo=FD000485>

Power Systems Equipment Detail

Customer No.	2	Oil Type	
Serial Number:	FD000485	Oil Quantity	
Make	CAT	Battery Charger Make	
Model	3516B	Battery Charger Model	
Arrangement		Battery Charger S/N	
CPL		Battery Charger Input Vols	
HF		Battery Charger Output Volts	
Engine Specification		Battery Charging Alternator Make	
Generator Make		Battery Charging Alternator Model	
Generator Model		Battery Charging Alternator S/N	
Generator S/N		Battery Charging Alternator Output Amps	
1.W	2000	Batteries Group Number	
Voltage	12470	Batteries Quantity	
Amp :		Batteries CCA	
Generator Specification		Batteries LeadAcid	
Air Filter Make		Batteries Nicad	
Air Filter Part Number		Batteries Other	
Air Filter Quantity		Electr Heater Make	
Oil Filter Make			
Oil Filter Part Number			
Done			

FIG. 83

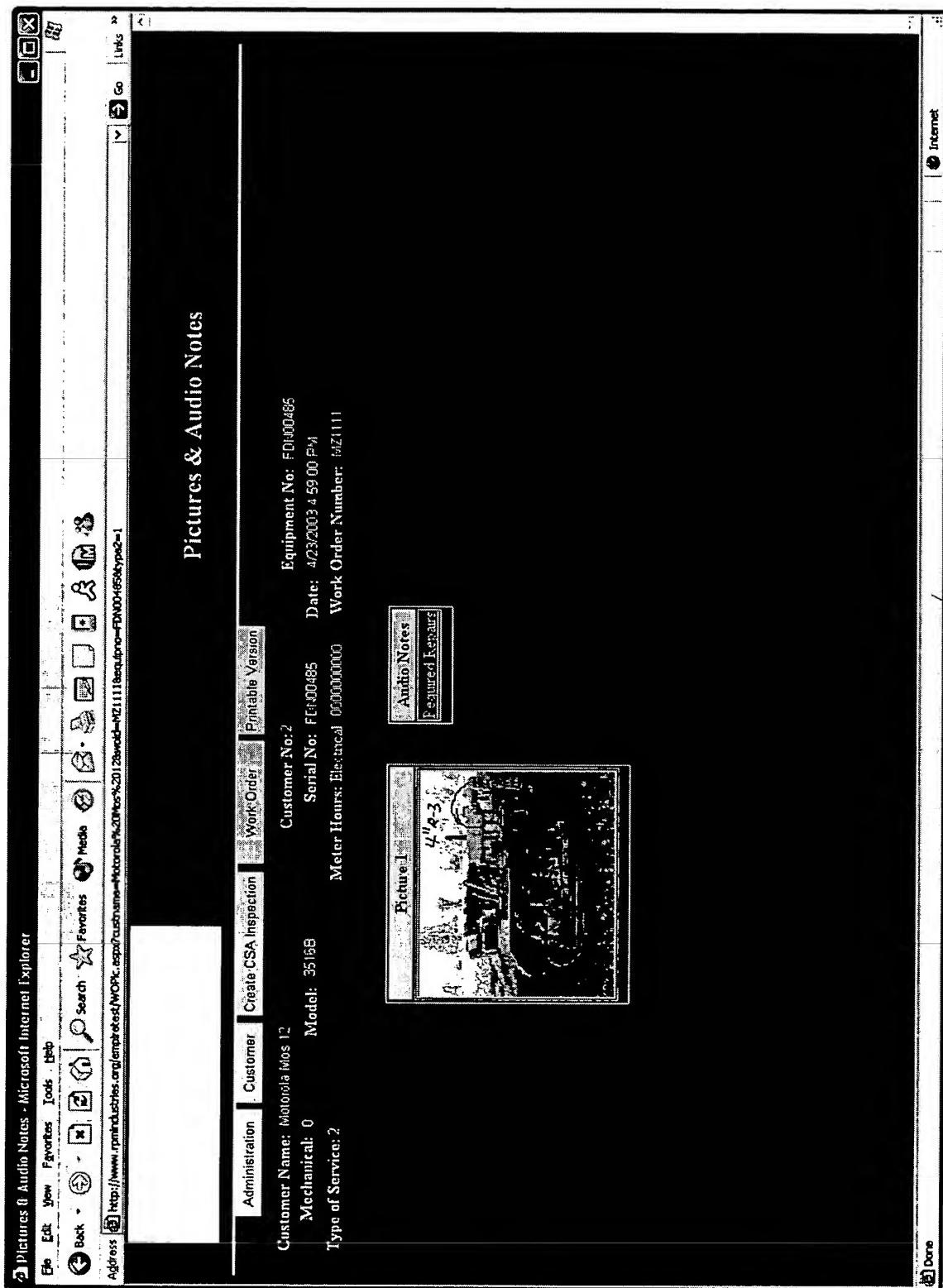


FIG. 84

5702

3 Work Order Load Bank - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back × Forward Stop Search Favorites Favorites Home Media Help

Address: <http://www.rainbowdcs.com/testerloadbank/unit.aspx?unitid=1&workorderid=1&workordertyp=1&workordername=1&workorderstatus=1> Create Mobile Favorites

Up 1 of 1 Down

Load Bank

Test Time	AMB TEMP	HZ	VOLTS	AMPS	AMPS	AMPS	KW	OIL PRESSURE	EXH TEMP RB
				2	3	Avg	CAL		
4/23/2003 5:00:00 PM	75	32000	120	100		12	13	80	100
4/23/2003 5:06:00 PM	70	31000	110	100		11	13	100	100
4/23/2003 5:10:00 PM	80	32000	110	1300		143	100	100	100
4/23/2003 5:12:00 PM	74	32000	120	100		12	13	87	98

Test Time	EXH TEMP LB	WATER TEMP	WATER IN	WATER OUT	FUEL PRESSURE	EXTRA 1	EXTRA 2	EXTRA 3
4/23/2003 5:00:00 PM	80	100	100	100	100	n/a	n/a	n/a
4/23/2003 5:06:00 PM	90	100	100	100	55	n/a	n/a	n/a
4/23/2003 5:10:00 PM	75	100	100	100	100	n/a	n/a	n/a
4/23/2003 5:12:00 PM	99	87	72	86	17	n/a	n/a	n/a

Done

FIG. 85

FIG. 86

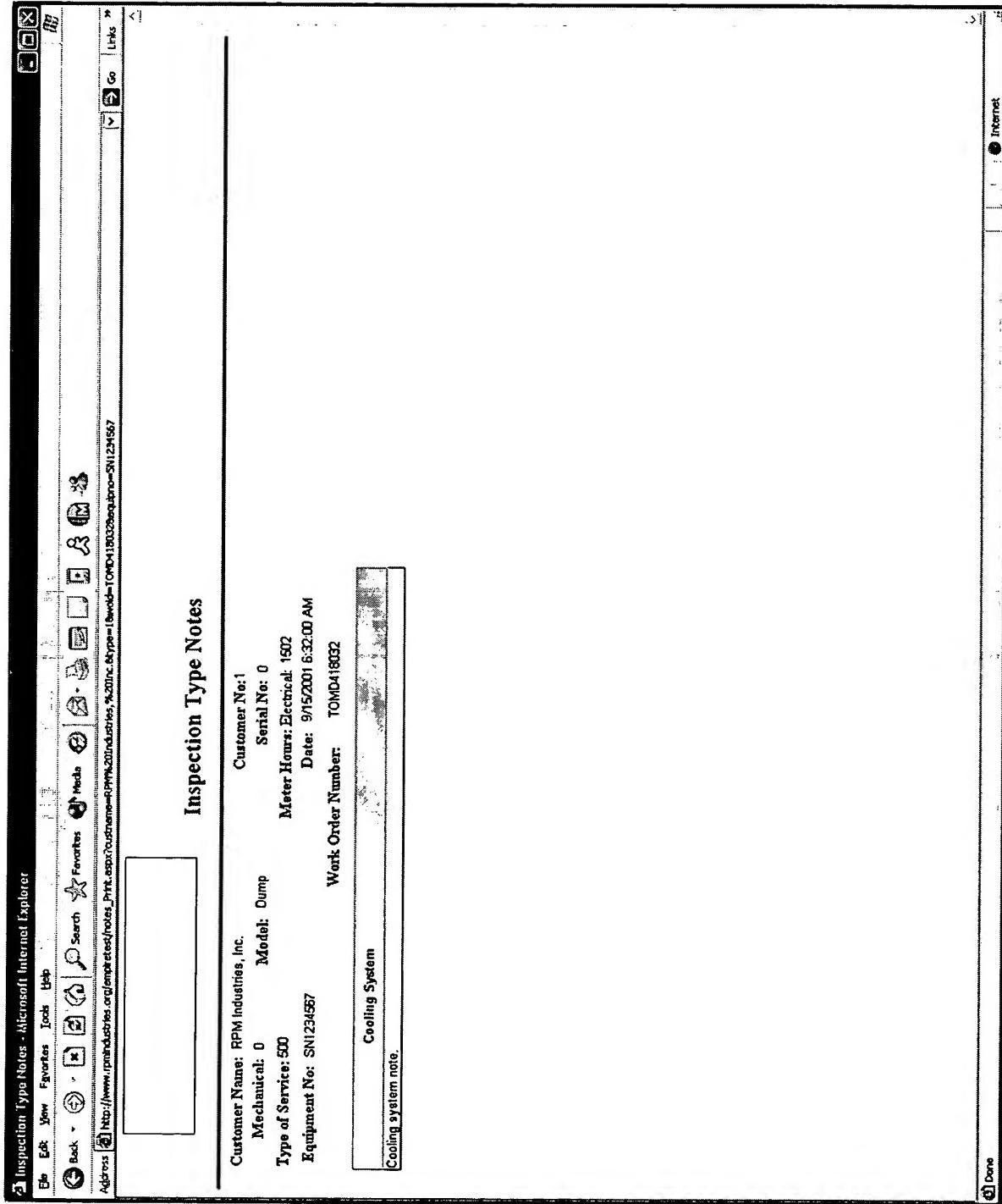
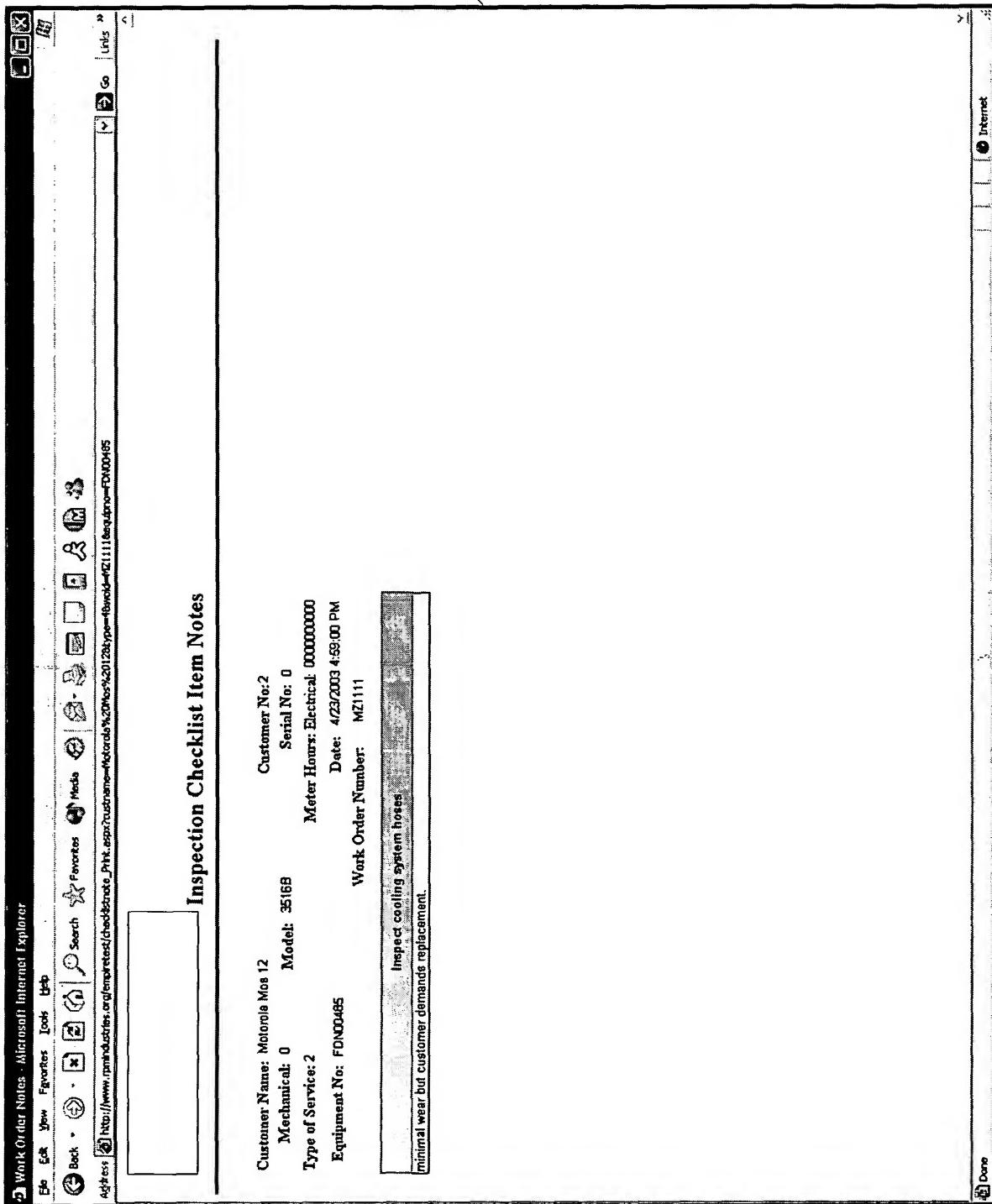


FIG. 87



Service Reports - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back • Search Favorites Media Help

Address <http://www.menardindustries.org/gleneltest/ServiceReportPrint.aspx?orderno=440007342074208&ordno=502534>

Service Reports

Attachment Serial No: **6102**

Equipment No:	Serial No:	1
Work Order Number:	Location:	00
Dealer Code:	Hours:	507
Work Order Date:	Model:	777D
Employee ID:	Instructions:	
Customer:	RPM Industries, Inc.	

Part No	Part Description	Group No	Did this
Responsible Name	Code	Containing Group Name	incident make
		Part	Comments
9y8400	reg 1 B	1406 none	True By
			inoperable?

[Previous](#) [Next](#)

PARTS

Left with Scrapped Return Job
Customer Yes No Complete
No Yes

WHAT DID YOU FIND WRONG?

Found 4111s

WHAT WAS DONE TO REPAIR THE PROBLEM?

Done Internet

FIG. 88

Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back × Forward × Stop × Home × Search × Favorites × Help ×

Address: http://www.pentairindustries.com/glenelg/electricalRepairReportPrint.asp?WO=7777

Required Repair Reports

Work Order Number:	Mod#: 3516B
Segment: 01	Serial No.: 0
Work Order Date & Time: 4/23/2003 3:44:00 PM	Last Serviced: 0
Date & Time: _____	Last Service Type: 0
Employee: _____	Current Service Type: 1
Customer: Motorola Mos 12	Electrical Meter: 00000000
	Mechanical Meter: 0
Zone Location: N/A	Location: _____

CheckList Item **CheckList Response**

In Phase Monitor RR

Inspect radiator/heat exchanger RR

Inspect cooling system hoses RR

Done

FIG. 89

CSA Inspection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back × Search Favorites Modem Modem Modem Modem Modem Modem

Address: <http://www.ipmproducts.org/testsets/workorder/Print.aspx?WO=MZ111&SetID=2>

Date: 4/23/2003 4:59:00 PM Mechanical: 0 Customer No.: 2
 Equipment No.: Model: 3516B Serial No.: 0
 Type of Service: 2 Meter Hours: Electrical: 0000000000

CSA Inspection Report

Cooling System		
Inspect radiator/heater exchanger	RR	Check cooling leaks Record freeze/boil over protection
Check filler cap	OK	OK
Inspect cooling system hoses	RR	Inspect hose clamps Check water pump
Check fan drive/pulleys	OK	OK
Check block heater	OK	Check Radiator Hoses
Lubrication, Fuel & Air Systems		
Replace oil & lube filters	OK	Collect oil sample Inspect crankcase breather
Inspect engine for oil leaks	OK	Drain water from separators
Replace fuel filters	OK	Inspect fuel filters
Inspect fuel priming pump	OK	Inspect dry tank/controls
Inspect fuel tank	OK	Replace air filters
Check all fuel lines	OK	Inspect air filter seals/clamps/pathways
Inspect air filter housing	OK	
Inspect all louvers/passageways	OK	
Cranking & Charging Systems		
Check Alternator output voltage	OK	Check battery electrolyte level
Check battery specific gravity	OK	Check battery charger output voltage
Check battery charger output Amperage	OK	Check all battery cables

Done Internet

6302

FIG. 90

FIG. 91

6402

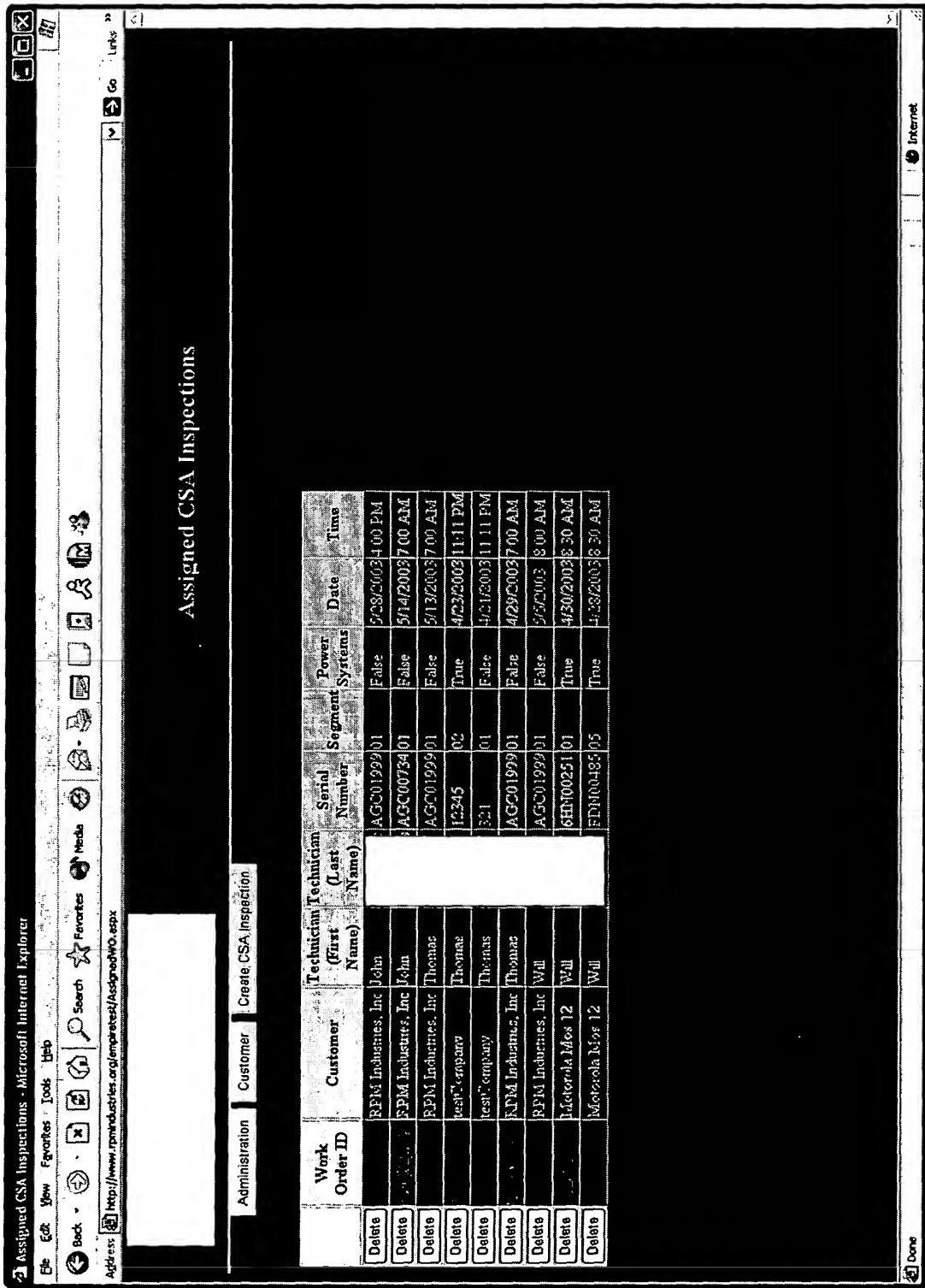


FIG. 92